

Relationships of Instructional Faculty of Agricultural Educator Teacher Preparation  
Programs of Organizational Culture and Selected Outcome Measures and Employee  
Characteristics

by

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## ACKNOWLEDGMENTS

*Dedicated to my father James P. Johnston who would have been so proud of me, God rest his soul.*

I had just spent my whole summer working to recruit and hire a new agriculture teacher in our high school. The young lady I hired did not have a degree and had never been in FFA, but I was assured she was plenty capable of handling the task, and that she was. She asked me to attend the state FFA convention in Great Falls, Montana to help supervise her students. It was there I ran into my long-time friend and colleague Bill Lombardi. As we discussed how the culture had changed, and the universities were simply not producing enough teachers to fill the void, it hit me that maybe I could be part of the solution. It was at that point in time that my journey to get a doctorate in agricultural education began. Thank you, Bill Lombardi, for encouraging me to jump out of a perfectly good plane and fall for four and a half years in pursuit of this degree. I had a great parachute to keep me safe though. Thank you to my beautiful and supporting wife Debbie who has been there every step of the way encouraging me and pushing me. Thank you to my family who has always been understanding, even when we couldn't do things because I was studying. I owe a big thank you to the faculty and staff in the Doc at a distance program who have created a strong and effective organizational culture that is supportive and kind. Dr. Baker, you have stuck by me through thick and thin, even when my ideas were a bit off base. Thank you for helping me make this happen. Dr. Murphy, thank you for always being supportive and offering kind words and encouraging advice, even when I was struggling. Thank you, Dr. Frazee, for stepping in as my TTU chair when Dr. Baker moved. Thank you Dr. Irbeck and Dr. Strong for serving on my committee and helping and encouraging me at each turn. Dr. Murphy, you don't know it, but you inspired me along the way through your teaching style and your eLearning work. I aspire to create the kind of online environment

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## **ABSTRACT**

Within every organization at every level, there exists a culture that has developed over time. This culture is the underlying tone for how the organization carries out its day to day practices. With an imminent teacher shortage in Agricultural Education, understanding the organizational culture of Agriculture Educator Preparation Programs (AEPP) may help to identify cultural dynamics that lead to placing more completers as teachers into School-Based Agriculture Education (SBAE) programs.

Both descriptive and correlational methods guide the investigator in understanding the phenomenon of organizational culture. This inquiry sought to describe the organizational culture that exists in AEPPs across the United States in terms of type and strength, as well as demographic characteristics in the population of faculty involved in AEPPs (N ~ 360). Survey methodology using the Organizational Culture Analysis Instrument (OCAI) based on Cameron and Quinn's Competing Values Framework yielded a response rate of 24% (N = 93).

Statistics indicated that the dominant perceived culture was the Market type inferring that a commitment to excellence and goal accomplishment were important factors to the population. The preferred culture type, however, was Clan, which is centered around a more caring environment and employee empowerment. The data was further disaggregated by AAAE region (North Central (n = 24), Southern (n = 42), Western (n = 26)) and described how each region was unique in makeup and organizational culture. Multiple linear regression analysis indicated that there was no significant effect between cultural strength and a combination of program completers and completers placed in SBAE programs. The analysis also indicated a non-significant effect of faculty academic rank and longevity. Results from this study present a starting

place for investigating and understanding the dynamics of organizational culture in agriculture education and how the profession can use this knowledge to meet the ever-changing needs of the profession.



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## **CHAPTER I**

### **INTRODUCTION**

The demand for teachers is real. Christian Amondson (2019) states that “The need for teachers is universal, regardless of economic conditions and political climates” (p. 1). Statistics show an alarming decline in enrollment in educator preparation programs (Amondson, 2019). Developing educator preparation is necessary for meeting the supply and demand need in education. Not unlike education in general, the demand for qualified teachers in SBAE programs has increased (Lawver, Foster & Smith, 2018). This phenomenon is faced with a decreasing number of individuals pursuing agricultural education as a career choice (Thieman, Rosch & Saurez, 2016). Even though the interest in teaching agricultural education remains constant (Lawver, Foster & Smith, 2018), the interest in agricultural education, in general, continues to be healthy, attracting in many cases, students who are interested in a career in communications or leadership. Higher education has met this changing dynamic by diversifying and expanding the programs they offer. Where the typical post-secondary agricultural education program of the past would focus primarily on teacher preparation and extension preparation, programs today also offer options in agricultural communications, and leadership, Extension and international programs. Without a doubt, this diversity in programming and a changing population of students and staff has brought about a change in the organizational culture of these educational entities (Smith-Hollins, Elbert, Baggett & Wallace, 2015). The primary focus on individual departments may no longer be exclusively on educator preparation but also share the state with other areas such as agricultural communications and agricultural leadership.

The dynamics of post-secondary education continue to transition. The cost of education is on the rise, and students who choose to teach as a career, struggle to pay off their education

relative to what they earn in salary. Teaching is hard work but teaching agricultural education is even more demanding with extended programs and student organizations such as FFA to manage. FFA itself has grown exponentially to include many more components to career development events, supervised agriculture experiences, and leadership development events. The culture of AEPPs has changed, and there are more options outside of teaching that allow students to choose alternative career paths, thus deemphasizing the focus on educator preparation.

Culture is a product of the environment over a long period of time and develops in most cases without conscious (Deshpande & Webster, 1989). According to Cameron and Quinn (2011), the effectiveness of an organization is influenced by the type and strength of an organization. Cameron and Quinn (2011) identify four culture types (Clan, Adhocracy, Hierarchy, Market) in their Competing Values Framework (CVF). The CVF is based off of two dimensions. The first is flexibility/discretion and stability/control. The second is internal focus/integration and external focus/differentiation. The dimensions are the axis that form the four domains or culture types. The CVF is used in this study to identify the type and strength of organizational culture in higher education agriculture educator preparation programs (AEPP). Strength is measured by comparing how respondents perceive their culture to how they would prefer their culture to be. By recognizing the type and strength of the organizational culture, an organization can institute change that will allow for more efficient goal attainment (Cameron & Quinn, 2011). While there are many factors to consider in measuring the effectiveness of academic units, in this study, effectiveness will be a measure of the variance accounted for by students who will complete an AEPP and completers who will teach in a school-based agriculture education (SBAE) program.

## **Background**

Research Priority Three in the National Research Agenda 2016-2020 published by the American Association for Agricultural Education (AAAE), suggested more studies are needed to determine the methods, models, and practices necessary to recruit and support teachers and extension agents in agriculture education (Stripling & Ricketts, 2016). The call for research in the 2011-2015 National Research Agenda states “further, accurate and reliable data that describes the quality and impact of educational programs and outreach efforts at all levels must be distributed to respective decision groups” (p. 10). One key outcome called for in the 2011-2015 National Research Agenda, is inquiry that defines the characteristics of effective agricultural education programs and teachers (Doerfert, 2011).

While Myers and Dyer (2004) challenged researchers to investigate trends in educator preparation programs (EPP), Smart and St. John (1996) suggest organizational effectiveness or colleges and universities hinges on their strength and type of organizational culture. Each department within an institution has its own culture. The culture of an organization will reproduce over generations without conscious, developing a dynamic defining the entity. Cultures build on the principle that practices and processes happen in the way they should happen (Mouton, Plaut & Strong, 2009). Equally as important is the intent to recognize if the type or strength of an academic unit is related to the number of completers placed in SBAE programs.

Accurate data and information are needed for developing strategies that target and guide potential agriculture teachers into a teaching field. Specific data along these lines is limited and quickly becoming outdated (Kantrovich, 2007; Myers & Dyer, 2004). Kantrovich (2007) challenges the agriculture education community to keep up with the trends in policy and the

needs of a changing student population as well as develop a plan for meeting the future demand for agriculture education.

### **Statement of Purpose and Research Objectives**

The purpose of this study is to identify and describe the type and strength of organizational culture that exists among (AEPP) in the United States.

The research in this study was guided by the following objectives:

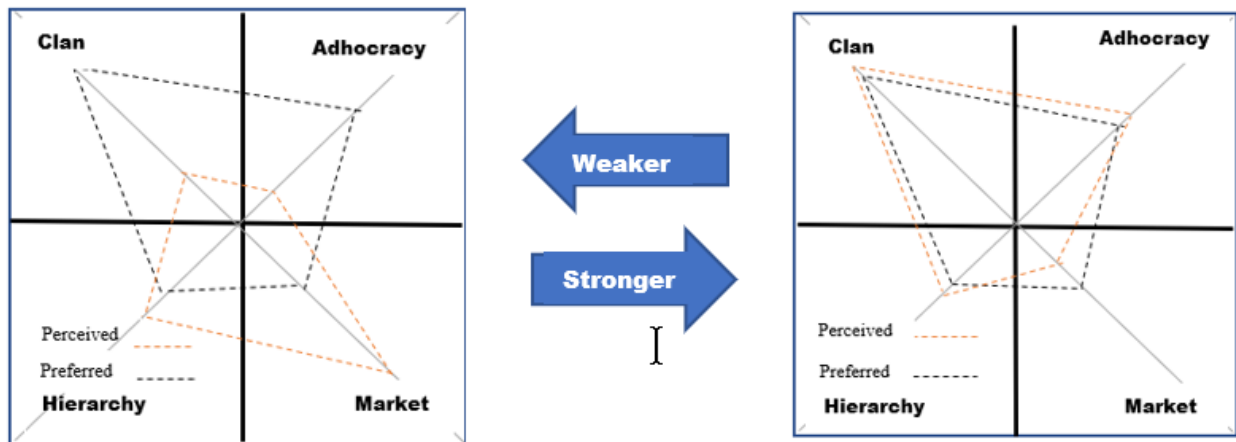
1. Identify AEPP faculty and staff perceptions of organizational culture and relationships between AAAE region, average years of service as a teacher educator, average years in current academic unit, academic rank, current academic role, teaching traits of current students, and teaching traits of recent program completers.
2. Determine the amount of variance in the self-perceived strength of organizational culture explained by teaching traits of current students, and teaching traits of recent program completers.
3. Ascertain the variance accounted for in strength of organizational culture by academic rank and longevity of the instructional faculty and staff.

### **Theoretical Base for the Study**

The Competing Values Framework (CVF) developed by Cameron and Quinn (2011) form the theoretical foundation of this study. This framework is useful in describing a wide range of organizational phenomena, including the type and strength of organizational culture (Cameron and Quinn (2011)). The CVF describes organizations as either Clan, Adhocracy, Hierarchy, or Market. These four culture types form the foundation of the Organizational Culture

Assessment Instrument (OCAI), which is the instrument used in this research. The OCAI is the most widely used instrument for assessing organizational culture (Cameron & Quinn (2011)).

The OCAI was used to determine the strength of the organizational culture by comparing respondents' perceived scores for each construct to their preferred scores. The strength of the culture is not measured by how vetted in a specific domain the responses are but how closely perceived and preferred scores are. Figure 1.1 shows visually how strong and weak cultures are represented when the results of the OCAI are plotted out.



*Figure 1.1* Culture Strength. Adapted from Cameron and Quinn's (2011) Competing Values Model.

## Definition of Terms

For this study, the following terms were added for reader understanding and to add pellucidity.

Agricultural Educator Preparation Program (AEPP), Or Agricultural Teacher Preparation Program- According to the U.S. Department of Education; Part 686 (2018)-- Teacher Education Assistance for College and Higher Education, the term teacher preparation program means “a

state-approved course of study, the completion of which signifies that an enrollee has met all the State's educational or training requirements for initial certification or licensure to teach in the State's elementary or secondary schools” (p. 4). For this study, the term Agricultural was added to identify Educator Preparation Programs (EPP) specifically for Agriculture, Food, and Natural Resources.

Faculty- The term faculty is a general term referring to the professional teaching staff. The term may be defined independently by individual universities. For this study, the faculty is considered the professional teaching staff as determined by each university.

Organizational Culture- Northhouse (2016) states, “The learned beliefs, values, rules, norms, symbols, and traditions that are common to a group of people or organization” (p. 428).

School-Based Agricultural Education (SBAE)- According to the National FFA Association, there are three components to an SBAE program: Classroom/laboratory instruction, Supervised Agricultural Experience Programs (SAE), and an active FFA program (Agriculture Education, 2018; Hughes & Barrick, 1993).

### **Basic Assumptions and Limitations**

It is important to recognize the assumptions and limitations of this research. The primary assumption of this research was that all AEPP departments prepare educators to teach in SBAE programs; educator preparation was similar and based on a set of standard such as the National Standards for Teacher Education in Agriculture as defined by the AAAE (Birkenholz & Deeds, 2010) and educators were prepared to teach the three-component model for high school agriculture education programs developed by the National FFA Taskforce. The three-component model includes classroom and laboratory instruction, supervised agriculture experience, and FFA programming (Hughes & Barrick, 1993).



The degree of social responsibility may affect survey participation (Groves, Cialdini & Couper, 1992). Agriculture educators are unique in that they share a common interest in agriculture and the profession of agriculture education. This common interest creates a bond shared throughout the profession that creates an exclusive culture. It was assumed that teacher educators in agricultural education shared a common interest in moving the profession forward.

The following factors must be considered when generalizing the population in this study. First, the size of AEPP programs across the nation varies in size from one student to over 200 students. Programs at the extreme ends of this dynamic might stand out in the population affecting a participant's willingness to participate. Each state has different credentialing procedures, for example, postgraduate programs versus post-secondary programs, which could affect the outcome analysis. Work overload and time constraints may limit the participation of some professors and faculty. An additional limitation is the peripatetic nature of the population in which individual faculty tend to move between universities and positions, a limiting factor in that the contact information was in constant flux.

To avoid the perception of faculty members possibly being identified or associated with a particular institution, only regional data was reported. The three AAAE regions, Western, Southern, and North-Central, were used for this reference. It should be noted that faculty from Oklahoma and Texas could choose between either the Western or Southern regions.

### **SUMMARY**

Only limited data that considers the cultural dynamic of post-secondary agricultural education academic units related to outcomes such as enrollment, program completers, and teachers placed in SBAE programs are available. The data is also limited that explores the relationship of the type or strength of organizational culture to faculty longevity. The purpose of this study was to describe with quantitative factors the organizational culture of agricultural

educator preparation programs, as well as determine if there was a relationship between organizational culture and other program attributes. The secondary purpose was to determine if there is a relationship between faculty longevity and organizational culture type and strength as determined by the OCAI. The intended outcome was to develop a model that reflects dynamics in an organizational culture that influence teacher preparation and placement. This study was guided by three research objectives related to the overall purpose statement. The definitions used, target population selected, instrument utilized, and other research parameters led to important assumptions and limitations. The next chapter is an overview of the relevant literature and the frameworks used to guide this study.

## **CHAPTER II**

### **LITERATURE REVIEW**

#### **Statement of Purpose and Research Objectives**

The purpose of this study is to identify and describe the type and strength of organizational culture that exists among Agriculture Educator Preparation Programs (AEPP) in the United States.

The research in this study was guided by the following objectives:

1. Identify AEPP faculty and staff perceptions of organizational culture and relationships between AAAE region, average years of service as a teacher educator, average years in current academic unit, academic rank, current academic role, teaching traits of current students, and teaching traits of recent program completers.
2. Determine the amount of variance in the self-perceived strength of organizational culture explained by teaching traits of current students, and teaching traits of recent program completers.
3. Ascertain the variance accounted for in strength of organizational culture by academic rank and longevity of the instructional faculty and staff.

#### **Introduction**

Between institutions offering agricultural education, there is limited data that links organizational practices and curriculum (McLean & Camp, 2000). The dearth of research creates a void in anecdotal information on which to develop teacher education programs (Myers & Dyer, 2004). Myers and Dyer (2004) called for constant reflection by teacher educators on their programs so they can adjust to meet modern needs. Furthermore, the evidence shows (AEPP) have cultural dynamics such as admission protocols that may be ostracizing potential agriculture

education teachers (Myers & Dyer, 2004). The responsibility of preparing future effective agriculture teachers resides with faculty at universities with educator preparation programs in agriculture (Roberts & Dyer, 2004)

A degree in agricultural education (AGED) is a combination of a degree in agriculture and a degree in education (Barrick & Garton, 2010). The culture of each program (educational or agricultural education) can affect how prepared a new teacher is. Roberts and Kitchel (2010) discussed how the policies at the university level, as well as the policies and procedures in the AEPP department, have a prominent role in student preparation.

Roberts and Kitchel (2010) make clear that every agriculture educator preparation program (AEPP) has the potential of being exclusively organized, and each scenario offers a unique cultural and structural dynamics. When non-agriculturally related education courses are not offered in the AEPP department, faculty are freed up to teach other courses in agriculture. When education courses are offered through the AEPP department, there is autonomy and control over the curriculum. Moreover, increased requirements from the college take away from the opportunity to enroll in courses that enhance a student's foundational knowledge in agriculture (Roberts & Kitchel, 2010).

In the call for continued research in agriculture education, Roberts and Dyer (2004) sum it up by stating, “Creating effective agriculture teachers is imperative for the long-term sustainability of agriculture education programs” (p. 94). Therefore, teacher educators at the university level are responsible for preparing effective agriculture teachers.

When we look at teacher education programs across America, we see that the size varies substantially across states and programs. In the 101 institutions offering a degree in agriculture education, only 92 graduated at least one qualified teacher (Lawver, Foster & Smith, 2018). According to the Status of U.S. Supply and Demand for Teachers of Agricultural Education,

2014 – 2016 report, some programs are producing as many as 128 license eligible completers within a four-year program while other programs have none or just two or three (Lawver, Foster & Smith, 2018). McLean and Camp (2000) report there are downsizing trends in agriculture teacher education programs in both staff and funding. Agriculture education is not exempt from educational reform over the past 15 years. National teacher standards, along with national curriculum standards, have affected the trends in teacher educator programs (McLean & Camp, 2000).

Additionally, because there is limited research on the characteristics of effective agriculture programs, and teacher educators do not definitively agree about specific coursework, they tend to rely on their own experiences in developing programs (Roberts and Dyer, 2004), justifying more extensive research into the commonalities between universities. For example, differences and similarities in technical courses, general studies, entrance requirements, and student teaching practices need to be studied to enhance the programs (McLean & Camp, 2000).

### **Organizational Culture**

It has been suggested that the organizational effectiveness of colleges and universities hinges on the strength and type of culture; the greater the strength of the culture, the greater the effectiveness of the organization (Smart & John, 1996). Research shows there are cause and effect relationships between a student's sense of community and his or her perception of instructors. The instructor's warmth, openness, and encouragement affect a student's perception and sense of community (Freeman, Anderman, & Jensen, 2007; Irlbeck, Adams, Akers, Burris & Jones, 2014). In a study conducted at Kansas State University (Klein & Washburn 2012), students reported factors relating to the environment were more important than any other factor relating to their choice to attend KSU.

Research shows the emphasis on warm, respectful interactions between instructors and students, along with a mastery of meaningful instruction, smooth operations, and aspects of student interactions, are contributing factors in a student's sense of belonging (Freeman et al., 2007). Meeting students' social and emotional needs is important in reducing student attrition. A change in atmosphere, high academic demands, and a student's failure to become engaged, can be related to the environment created within a department. A person's need to belong is fulfilled by a perception of a caring environment, and students at every level will benefit from supportive interactions with staff (Freeman et al., 2007).

In many cases, the culture and environment of a department will entice incidental learning concerning knowledge, insights, and perspectives gained through immersion in the culture of the academic department (Mars, 2016). Perceived instructor characteristics can have a positive effect on a student's sense of belonging. These characteristics include warmth and openness, student participation, and instructor organization. Understanding what promotes a student's sense of belonging and developing programs to improve undergraduate instruction (such as support programs for freshmen) are essential in reducing freshmen attrition and can help struggling departments regain capacity (Freeman et al., 2007).

The organizational culture in colleges and universities may not follow the model of culture seen in organizational theory, which developed around business and administration. These forms or types of organizational culture are, however, effective at various performance levels (Smart & St. John, 1996). Smart and St. John (1996) also contend that while the effectiveness of an organization is not dictated by the type of culture, there is a distinct connection with the strength of the organizational culture and the effectiveness of the organization discussed later in this review.

### **A brief history of organizational culture research.**

Organizational culture as a field of study is relatively modern. The concepts of group norms and climate have been around since the 1920s or before (Schein, 1990). Action research was a popular way to study group norms and climate in the 1940s and 1950s (Schein, 1990). Krober and Kluckhohn (1952) pointed out, “The sense given the concept is a matter of considerable practical importance now that culture theory underlies much psychiatric therapy as well as the handling of minority problems, dependent peoples, and even some approaches in the field of international relations” (p. 5) . Organizational psychology grew into a field of study in the early 1960s as business management schools became popular (Schein, 1990; Schein, 1996). During this era, Marketing scholars became interested in behavioral science to study consumer behavior to understand cultures and sub-cultures for Marketing purposes (Deshpande & Webster, 1989). The 1970s gave way to an increased interest in understanding the relationship between culture and performance outcomes leading up to an increase in organizational culture research in the 1980s (Schein, 1996). This decade gave rise to widespread interest in the interaction between culture and management. Because of the similarities of Japanese management styles and American colleges and universities, there was an increased interest in studies of the interactions of organizational culture and management (Masland, 1985).

### **Definition of organizational culture.**

A firm definition of culture has eluded researchers and remains in search of a meaning that can be decided on with consensus (Gayle, Tewarie & White, 2011). E. H. Schein (1996), one of the prominent researchers and writers on organizational culture in the ‘1980s and ‘1990s defines culture as “the set of shared, taken-for-granted implicit assumptions that a group holds and that determines how it perceives, thinks about, and reacts to its various environments” (p.

230). An organization involves the exchange between individuals in which each party gives and receives something of value (Wilkins & Ouchi, 1983). Martin and Siehl (1983) offered that cultures offer an interpretation of an institution's history that members can use to decipher how they will be expected to behave in the future or an informal control ethnicism that may affect productivity and at the same time a unifying element that is unique to an individual setting.

Eventhough culture is a set of shared assumptions and understandings about organizational functioning, it is also referred to as the history of norms and values that members believe (Deshpande & Webster, 1989). Deshpande and Webster (1989) go on to define organizational culture as "the pattern of shared values and beliefs that help individuals understand organizational functioning and thus provide them norms for behavior in the organization. That is, organizational culture is related to the causality that members impute to organizational functioning" (p. 4). McKim, Rutherford, Torres, and Murphy (2011), state "is the deeply rooted nature of the organization as the result of long-held formal and informal structures, expectations and procedures" (p. 88). Culture could be viewed as a framework for decision making and behavior (Gayle, Tewarie & White, 2011). None the less Gayle, Tewarie, and White (2011) posit that while researchers and writers struggle with agreeing on a single definition, those who observe can clearly identify the existence of a discernible culture in most organizations.

### **Organizational Culture in Higher Education**

Organizational culture is an important theory in the attempt to refine organizational performance (Smart & St. John, 1996). According to Strong and Williams (2014), "Higher education is a unique environment that poses its own set of challenges" (p. 201). McKim et al. (2011) state that "monitoring and evaluating programs and outcomes is common practice in



educational arenas. A clear understanding of the climate of an organization is important, potentially providing leadership with an understanding of how to improve the functionality of an organization” (p. 87). In the study of the governance of colleges and universities, organizational culture is used as a tool to identify the effectiveness of these units (Smart & St. John, 1996). In higher education, organizational culture focuses on shared values, beliefs, and ideologies (Masland, 1985). An organization’s values as well as their beliefs are deeply engrained in past experiences and an understanding that history repeats itself (Shinn & Baker, 2010). Masland (1985), discusses how the concept of organizational culture has been applied to colleges and universities, the influence of organizational culture and the relevancy of organizational culture in higher education. He discusses the irony of how the study of Japanese firms developed because of the similarity of managerial practices in these firms is similar to American higher education. Masland (1985) contends that the concept of organizational culture in higher education is not new. There are four spheres that are associated with academic life in institutions of higher learning. They include the culture of a specific academic discipline, the culture of the profession, the culture of the institution, and the culture of higher education as a whole. Masland draws a distinction between climate and culture, pointing out the history of interest in campus life. Organizational culture focuses on the shared values, ideologies, and beliefs that are unique to an institution. Moreover, organizational culture affects curriculum and administration.

Masland (1985), focuses on four particular influences of culture in higher education: saga, heroes, symbols, and rituals. Saga exemplifies an organization's history and describes its accomplishments. The saga is what sets the college or department apart from others. Heroes are the people who are important to the organization. They are representative of the organization’s values and ideals. A symbol is a metaphor for the organization, something tangible like a mission

statement or an overarching belief. Rituals translate culture into action and are evidence of culture. Research data for this article was collected qualitatively and gleaned underlying themes that, when put together identified strong cultures as straight forward and consistent themes.

Masland (1985) continues on to encourage more research in an organizational culture that would provide insight into colleges and universities. Culture tends to influence managerial style and decisions; therefore, understanding the culture of a particular institution or department could help explain the dynamics of its management. He also points out that the study of organizational culture in higher education could explain the mechanisms behind explicit and implicit controls that influence campus life. He further explains how the exploration of organizational culture can explain the rationale of institutional development, decision making, and governance.

Smart and Hamm (1993), explore the use of Cameron's (1988) nine dimensions of organizational effectiveness. The authors report that at the time of this article in 1993, such organizations as The National Endowment for the Humanities, The National Institute of Education, and The Association of American Colleges were focusing much attention on the effectiveness of American colleges. Cameron's (1988) effectiveness model was believed appropriate for their research because of the wide use in the research of effectiveness in four-year institutions.

The results of the factor analysis in their study provided strong support for the overall capacity of the nine effectiveness scales proposed by Cameron (1978). The findings of Smart and Hamm's study clearly support the suitability of the use of the nine dimensions of organizational effectiveness proposed initially by Cameron (1978). Smart and Hamm (1993) go on to say the results of such an assessment of organizational performance can provide the basis

for more in-depth strategic management designed to enhance existing strengths and to improve institutional performance.

Fralinger and Olson (2007) affirm that culture is a fundamental component of decision making in universities. The purpose of their research was to explore the organizational culture at the university level using Cameron and Quinn's Organizational Culture Assessment Instrument (OCAI) instrument. In this study, the OCAI was used to determine how departmental culture affects the perceptions, thoughts, and feelings of students from the Health and Exercise Science Department at Rowan University.

According to Fralinger and Olsen (2007), in the context of the academic setting, "culture can be referred to as the certain values that leaders try to incorporate in their organizations" (p. 85). Understanding what goes on in groups and organizations and the cultural issues that ensue are key components in understanding the organizational culture at the university level (Fralinger & Olsen, 2007; Schein, 1990). The leadership in an organization, at least in part are responsible for creating the organizational culture. The leadership is then responsible for the creation, management, and sometimes destruction of culture (Fralinger & Olsen, 2007; Schein, 1990). Fralinger and Olsen (2007) posit that by using the OCAI to determine the thoughts, feelings, and aspirations of university students, the leadership could use this information to create positive change. Fralinger and Olsen (2007) define the culture at the university level as "the personality of the organization" (p. 86). They would further generalize the meaning of organizational culture at the university level as the "values and beliefs of the stakeholders" (p. 85). Furthermore, it is important for the leadership to have a good understanding of the values, norms, assumptions, and tangible signs (artifacts) among faculty members, staff, and administrators. The beliefs and processes of trustees, administrators, faculty, campus community

members, competitors, and society combine to shape the organizational culture of that university. Fralinger and Olsen (2007) discovered that the type of culture (i.e., Clan, Adhocracy, Hierarchy, or Market) was a larger determinant of organizational effectiveness than was a strength.

Fralinger and Olsen (2007) reported, according to the OCAI instrument, that the Health and Exercise Science Department at Rowan University indicated Clan culture type presently and a preferred Clan culture type. The study validated the need for further research in organizational culture to include the faculty and staff of individual departments. Fralinger and Olsen (2007) recognize that faculty, staff, and administrators in higher education require a valid scientific knowledge base in order to administer effective academic programming. The results of this study and studies like it continue to add to this knowledge base.

In this research, Berrio (2003) utilizes Cameron and Quinn's CVF and OCAI to describe the type of culture found among Ohio State University Extension personnel. Berrio (2003) uses Schein's (1992) along with Cameron and Quinn's (1999) description of organizational culture to develop a modern definition to include what is valued, dominant leadership style, procedures, and routines, language, and symbols. The definition further defines success of an organization which, represents the assumptions, expectations, values, as well as definitions present in an organization.

Berrio (2003) agrees with Smart and Hamm (1993) and with Smart and St. John (1996) in his findings that almost two-thirds of the organizational culture types in higher education are Clan and that the Clan type of culture is the most effective for colleges and universities. He further describes the Clan culture in Extension as flexible with a concern for people and customers, focusing on internal maintenance. The Clan culture is identified as a friendly place to work or family-like. Leaders are viewed as mentors and facilitators. Loyalty, commitment, and

tradition are binding factors in the organization. Cameron and Quinn (2011) describe Clan organizations to emphasize individual development, morale, teamwork, participation, and consensus.

Berio (2003) describes the OSU Extension's strength by assigning point to each culture type. Even though the perceived strength was described as being only slightly strong, the preferred score was much stronger. The clan culture type possessed a clear focus, unity and a vision common among all members. Berrio (2003) concludes by suggesting that the results for this study and studies like it might have implications that would help embrace strategic issues facing organizations such as an Extension.

Tierney (1988), provides a rational rationale for why organizational culture is a useful concept for understanding management and performance in higher education. He further attempts to define organizational culture as it relates to colleges and universities. Tierney (1988) states that "an organization's culture is reflected in what is done, how it is done, and who is involved in doing it. It concerns decisions, actions, and communication both on an instrumental and a symbolic level" and "the culture of an organization is grounded in the shared assumptions of individuals participating in the organization" (p. 3).

Tierney (1988) suggests there is a void in the understanding of the portrayal of organizational culture in developing management and institutional performance, which impedes our capacity to address the challenges that face higher education. He encourages a complete investigation of organizational culture in education to increase the awareness of factors that will impact the organization. Such an understanding will help influence the cultural dynamic in organizations.

Sorensen (2002) contended, “prevailing accounts of the benefits of strong corporate cultures emphasize the virtues of internal consistency resulting from internal agreement about core values and norms” (p. 1). He demonstrates in his research that strong culture firms have more reliable or consistent performance in relatively stable environments, but in volatile environments, the reliability benefits of strong cultures will disappear. The performance benefits of a strong corporate culture demonstrate controlled and enhanced coordination within the firm, improved goal alignment between the firm and its members, and increased employee motivation. The theory of organizational is impacted by the study of the dynamic between culturally strength and performance. Such knowledge gives insight into developing strong cultures.

A review of the literature offers that there is a large body of research that suggests the organizational culture is measurable. However, these studies focus more on the behavior and less on the meaning of cultural types (Sorensen, 2001). Additionally, a culture can be considered strong if the norms and values are universal and believed throughout the organization. Sorensen (2002) states, “one of the key consequences of a strong corporate culture is that it increases behavioral consistency across individuals in a firm” (p. 5).

Sorensen (2002) describes the performance benefits of strong cultures as widespread consensus and endorsement of organizational values and norms, as well as enhanced goal clarity about corporate goals and practices. Moreover, cultural strength is defined as the degree of agreement and commitment to organizational values and norms.

Saffold (1988) discusses the attributes of cultural type and strength and how they are related to organizational performance. Saffold (1988) looks at the strong culture hypothesis, “if an organization's culture is to contribute to enhanced performance, it must be both strong and possess distinctive traits: particular values, beliefs, and shared behavior patterns” (p. 546). He

contends that in order to measure cultural strength that categories defining cultural strength need to be more defined than the typical generalizations. An analysis of cultural strength should be based on how contextual processes are culturally conditioned to contribute to outcomes, and researchers of culture-performance links should recognize multiple, mutually causal interactions.

Smart and St. John (1996) sought to explore two lines of inquiry related to the effectiveness of four-year colleges and universities, dependent on their culture type and strength. The first line of inquiry focuses on the type of organization based on four culture types (Clans, Adhocracy, Hierarchy, and Market). The second line of inquiry is the strong culture hypothesis, which simply states that in order for an organization to perform at high levels, both must be strong and possess distinctive cultural traits. The authors suggest that the results of this study can assist in shaping actual management policies and practices to enhance the successful performance of colleges and universities. Their findings suggest that while a strong culture type is important, some culture types have a stronger positive relationship with measures of organizational effectiveness. The relationship between accepted or preferred theory and theory perceived or in use is a measure of cultural strength. Smart and St. John (1996) define cultural strength as “those in which there is congruence between espoused beliefs and actual practices, whereas weak cultures are characterized by incongruence between espoused beliefs and actual practices” (p. 223).

The authors' findings suggest that strong academic cultures are no more effective than weak cultures, and seriously questions the independent contribution of culture strength to the effective performance of institutions of higher learning. They did discover, however, that the strength of the organizational culture does influence the link between culture and performance validating the connection between cultural strength and cultural type. Their findings also suggest

that there is no single best type of culture; rather, divergent culture types are linked to more advanced levels of performance on different effectiveness dimensions.

In regard to the type of culture, the authors state that “Organizational culture, in general, and specific culture types, in particular, have an established tradition in organizational research on American higher education” (p. 223). The most common type of organizational culture in American higher education is the Clan type of culture, with nearly two-thirds of the institutions exhibiting a predominantly Clan culture. Further suggestions imply that the Clan culture type is the most effective type in higher education. The authors summarize by suggesting that both culture type and culture strength are useful concepts in the efforts to understand the link between organizational culture, organizational effectiveness, and organizational performance.

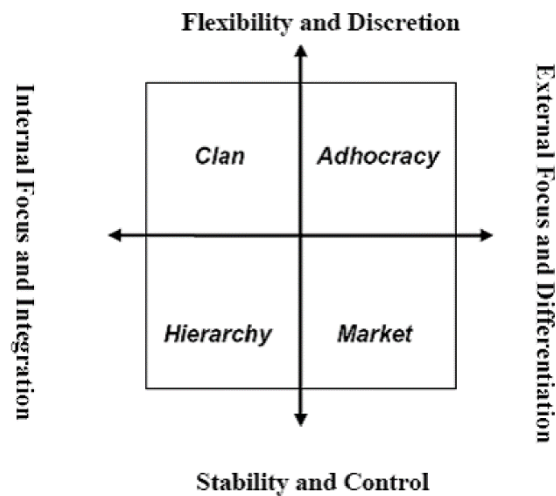
### **The Competing Values Framework and OCAI Instrument**

The theoretical framework for this research is Cameron and Quinn’s (2011) Competing Values Framework (CVF). Cameron and Quinn (2011) claim, “the Organizational Culture Assessment Instrument (OCAI) is the most frequently used instrument for assessing organizational culture in the world today” (p. 27). In this claim, they point out that the OCAI has been extensively used in scholarly research as well as the corporate world to assess organizational culture and effectiveness. The OCAI was designed to help organizations identify their current culture and at the same time, glean from the members the future expectations of the organization. The instrument has been widely used in many settings throughout the world in industry, military organizations, athletic organizations as well as higher education and government. While the validity and reliability of the instrument, due to the wide-scale use, are grounds for its use in research, and additional allure is a fact that it is short and parsimonious (Cameron & Quinn, 2011).



The OCAI is based on Cameron and Quinn's CVF. Cameron and Quinn (2011) posit that CVF is the dominant framework for assessing organizational culture because it is useful in organizing and interpreting a wide variety of organizational phenomena. According to Cameron and Quinn (2011), the CVF was developed from research conducted on major indicators of effective organizations. Since there were too many indicators (39), statistical analysis was used to identify two major dimensions and four main clusters. The two dimensions, flexibility/discretion, and external focus/differentiation form the axis for the framework, while the four clusters form the quadrants as culture types. Each dimension and each quadrant represent the core values on which judgments about organizations are formed. Clan culture is a balance between flexibility/discretion and internal focus/interactions. Adhocracy culture is a balance between flexibility/discretion and external focus/differentiation. Market culture is a balance of external focus/differentiation and stability/control. Lastly, Hierarchy culture is a balance of stability/control and internal focus/interactions.

Figure 2.1 shows the Competing Values Framework with the four dominant culture types, which form the foundation of the OCAI. They are Clan, Adhocracy, Hierarchy, and Market.



*Figure 2.1.* The Competing Values Framework. Adapted from “Diagnosing and Changing Organizational Culture: Based on the Competing Values Framework,” by K.S. Cameron and R. E. Quinn, 2011, Copyright 2011 by John Wiley & Sons, Inc.

Cameron and Quinn (2011) make note that the four core values represent opposite or competing assumptions. The authors point out that the names of the quadrants were derived from scholarly research dating back to the 1980s. The Clan culture type represents a friendly place to work where people share of themselves. The Adhocracy culture type is a dynamic, entrepreneurial, and creative place to work. The Hierarchy culture type is very formalized and structured. The Market culture type is results-oriented. Cameron and Quinn (2011) point out that these same characteristics also define what is viewed as efficiency within each quadrant or that efficiency is defined uniquely at each quadrant.

Thakar (2010), boldly states that the Competing Values Framework (CVF) “has been identified as one of the 40 most important frameworks in the history of business” (p. 1). He further exploits the usefulness of the model for organizing and understanding a wide variety of organizational and individual phenomena, growth strategies, approaches to theories of organizational effectiveness, leadership approaches to theories of organizational design, stages of life-cycle development, organizational qualities, and leadership roles. Thakar (2010) discusses

how the CVF has been used to clarify an organization's growth strategies by assessing a current and preferred culture. The instrument has also been used to identify cultural matches and mismatches that would lead to unsuccessful mergers or partnerships that would more likely be successful.

Yu and Wu (2009) state that "the Competing Values Framework (CVF) is one of the most influential and extensively used models in the area of organizational culture research" (p. 37). Compared with other models and scales, the CVF and its matched scale OCAI have solid validity and reliability in most contexts as well as being a convenient instrument to administer. A strength of the CVF is that it measures the effectiveness of an organization and integrates most of the dimensions of organizational culture mentioned in the literature.

The authors go on to describe each of the four culture types which broadly define organizational culture. They describe the Clan type as "full of shared values and common goals, and atmosphere of collectivity and mutual help, and an emphasis on empowerment and employee involvement" (p. 38). The Adhocracy culture "is like a temporary institution, which is dismissed whenever the organizational tasks are ended and reloaded rapidly whenever new tasks emerge" (p. 38). The Market culture "focuses on transactions with the environment outside the organization instead of internal management" (p. 38). Lastly, the Hierarchy culture "has a clear organizational structure, standardized rules and procedures, strict control, and well-defined responsibilities" (p. 38).

Yu and Wu (2009) contend that the competing values framework is a solid model to use as a conceptual framework to study organizational culture. Furthermore, the authors conclude that the OCAI is suitable for quantitative research, especially for studies on organizational culture change and on the identification of culture types related to organizational effectiveness.

Helfrich, Mohr, Meterko, and Sales, (2007), lay groundwork in their study of the CVF that challenges several of the validity constructs. Although the authors contend that the CVF is one of the more widely used instruments in the health services industry, they discovered limitations to its application in terms of external validity when applied to non-managers. There were indications that non-managers had trouble distinguishing between the entrepreneurial, team, and rational cultures.

Helfrich et al. (2007) submit that further research needs to be conducted on the differences in perception of organizational culture among managers and non-managers as well as on the psychometrics of particular items. Overall, this study gives rise to caution in drawing inferences when applied to populations where they have not been validated. Their findings highlight the challenges facing the assessment of organizational culture in a reliable and comparable way as well as the importance of validating organizational culture instruments when used in the context of new and different populations.

Quinn and Spreitzer (1991), discuss their research on comparing the ipsative or forced scale and a Likert type scale as used with the OCAI. The OCAI was originally developed with an impassive scale in which respondents are prompted to divide 100 points among the four schemes in the question, depending on how similar they think each scheme is to their own organization's culture. Questions that are in the Likert type scale format lend themselves more readily to statistical analysis. Their research compares the validity of these two scales as well as uses each scale to measure the type and strength of the organizational culture of various organizations.

The first instrument uses four scenarios to describe each of the four quadrants in the competing values framework of culture. This instrument was developed by Kim S. Cameron in 1978. Ipsative measures are not independent of each other and tend to be deceptive, which are not

suitable for correlational analysis and regression. Additionally, Likert scales allow for an independent measure of each culture quadrant. Likert scales are appropriate for correlational analysis and regression analysis as well as allows for a more realistic description of the culture.

Quinn and Spreitzer (1991) conclude in their analysis comparing the two models that the ipsative measure instrument may be used in applied settings where the objective is to emphasize the differences among the four culture types. The instrument that uses Likert scales may be appropriately used in situations where the data will be submitted to more complex analyses, such as inferential statistics requiring interval scales.

Lamond (2003), tested the validity of the CVM on managers in Australian organizations. Lamond contends through his review of literature on organizational culture that in the United States, the CVM is a widely accepted and implemented tool used in measuring an organization's effectiveness and type. In his review, Lamond (2003) concluded that CVM is beneficial as a way of operationalizing organizational culture by identifying the dimensions as well as similarities and differences across cultures to be evaluated.

Lamond (2003) found in his research that the psychometric qualities of the CVM were both valid and reliable as well as consistent with prior research. He also points out similarities in results from the CVM and Hofstede's CVM, which, further extend the validity of the instrument as a measure of organizational culture.

## **SUMMARY**

The American Association of Agricultural Education continues to call for research that suggests more studies are needed to determine the methods, models, and practices necessary to recruit and support teachers and extension agents in agriculture education (Stripling & Ricketts,

2016). Smart and John (1996) make the connection that there is a distinct connection with the strength of the organizational culture and the effectiveness of the organization.

Researchers agree that there is no discernable definition of organizational culture (Gayle, Tewarie & White, 2011; Schein, 1996; Deshpande & Webster, 1989; Wilkins & Ouchi, 1983). Generally speaking, most definitions agree that shared values and understandings develop over time and help determine the functionality of an organization.

Organizational culture started to be recognized as a field of research as far back as the 1920s with studies of group interactions moving into the '40s and '50s where action research was popular in examining group norms and group climate (Schein, 1990). Today instruments that measure and describe organizational culture are widely used to encourage change and strategic planning. Cameron and Quinn's (2011) OCAI became one of the most widely accepted instruments used today.

The study of organizational culture in higher education was stimulated through the efforts to improve organizational management and performance (Smart & St. John, 1996). Organizational culture affects curriculum and administration through the shared values, ideologies, and beliefs that are unique to an institution (Masland, 1985). Smart and Hamm (1993) validate the appropriateness of Cameron's (1978) effectiveness model in the study of organizational culture in higher education. Fralinger and Olson (2007) saw the need for further research in higher education to include the faculty and staff of individual departments.

An organization's effectiveness can be determined by the type and strength of the organizational culture (Cameron & Quinn, 2011; Saffold, 1988). Research suggests that strong culture firms have more reliable or consistent performance in relatively stable environments (Sorensen, 2002). Furthermore, the type and strength of an organization are related to the

performance of that organization even though these parameters tend to be weakly defined (Saffold, 1988). For the purposes of this research, four culture types are identified with the CVF to include Clan, Adhocracy, Hierarchy, and Market (Cameron & Quinn, 2011; Smart & St. John, 1996).

The theoretical framework used to guide this research is Cameron and Quinn's (2011) Competing Values Framework (CVF). The Organizational Culture Assessment Instrument (OCAI) is derived from the CVF and measures organizational culture (Cameron & Quinn, 2011). The OCAI has been widely used in many settings throughout the world in industry, as well as higher education and government. The validity and reliability of the instrument are due to the wide-scale use in research (Cameron & Quinn, 2011; Thakar, 2010). CVF is one of the most widely used models in organizational culture (Cameron & Quinn, 2011; Thakar, 2010; Yu & Wu, 2009). Additionally, research shows the psychometric values of the OCAI are both valid and reliable, justifying the applications to this research (Cameron & Quinn, 2011; Thakar, 2010; Yu & Wu, 2009; Helfrich et al., 2007; Lamond, 2003). The next chapter outlines the methods and analysis used in this study.

## **CHAPTER III**

### **METHODS**

This section is an overview of the research methods used in the design and implementation of the quantitative survey research on organizational culture in AEPP departments across the United States. Following a brief overview of the purpose, each research objective will be described in more detail and will include the method of analysis. The instrument and participant characteristics are followed by a description of the procedures used for data collection and analysis.

#### **Overview of Purpose**

The purpose of this study was to describe with quantitative factors the organizational culture of agriculture educator preparation programs (AEPP), as well as determine if there was a relationship between organizational culture and other program attributes. With an imminent teacher shortage in agricultural education, understanding the organizational culture of AEPP departments may help to identify cultural dynamics that lead to placing more completers as teachers into SBAE programs.

#### **Research Design**

Descriptive studies describe the state of a phenomenon as carefully and accurately as possible (Frankel, Wallen & Hyun, 2012). In this study, the researcher used both descriptive and correlational methods for an exploratory understanding of the phenomenon of organizational culture. Correlational research looks for relationships between two or more variables (Frankel et al., 2012). This study describes the organizational culture that exists in AEPP departments, as well as determines if there is a relationship between organizational culture strength, faculty perceived teacher traits of students, and faculty perceived teacher traits of completers. Smart and St. John (1996) contend that the relationship between what is favored and what is in use is a



measure of cultural strength. The strength of the organizational culture was determined by correlating the responses between the present and preferred in each construct. The higher the correlation, the stronger the organizational culture (Smart & St. John, 1996). The researcher also wants to determine if the strength of organizational culture can be predicted by the academic rank of the teaching staff, and the years of experience of the teaching staff. Table 3.1 displays the research questions that will be answered through this study.

Table 3.1

*Research Objectives, Independent Variables, Dependent Variables and Method of Analysis.*

	<b>Research Objectives</b>	<b>Independent Variable</b>	<b>Dependent Variable</b>	<b>Method of Analysis</b>
1	Identify AEPP faculty and staff perceptions of organizational culture and relationships between AAAE region, average years of service as a teacher educator, average years in current academic unit, academic rank, current academic role, teaching traits of current students, and teaching traits of recent program completers.			Descriptive
2	Determine the amount of variance in the self-perceived strength of organizational culture explained by teaching traits of current students, and teaching traits of recent program completers.	Strength of the organizational culture	Student's teacher traits and completer traits	Multiple Regression Analysis
3	Ascertain the variance accounted for in strength of organizational culture by seniority and longevity of the instructional faculty and staff.	Strength of organizational culture	Academic Rank and longevity of the faculty	Multiple Regression Analysis

## **Instrumentation**

Survey methodology with non-probability sampling was used to gather data for this study. The instrument was developed in Qualtrics software and distributed through email via a provided link. All of the evidence was gathered through Qualtrics and provided to the researcher as raw data. The instrument used to assess the dynamics and magnitude of organizational culture was a modified version of the “Organizational Culture Assessment Instrument” (OCAI) developed by Cameron and Quinn (2011). The OCAI was adapted with language and terms consistent with an academic institution and was used to describe the organizational culture profile of university agricultural educator preparation programs (AEPP). The addition of questions developed by the researcher gathered data for use in the correlational analysis.

The OCAI consists of four domains referred to as quadrants, Clan, Adhocracy, Market, and Hierarchy. Each domain is described by six constructs, Dominant Characteristics, Organizational Leadership, Management of Employees, Organizational Glue, Strategic Emphases, Criteria of Success. To determine the culture type, a Likert scale was used to award higher point values to the alternative that is most like their organization (Quinn & Spreitzer, 1991). The strength of the culture was determined by comparing the perceived scores with the preferred scores. The more closely related the scores within a culture type, the greater the strength of the organizational culture (Berrio, 2003).

According to Cameron and Quinn (2011), the validity of this instrument has been established using Cronbach’s Alpha coefficients applied to multiple venues of organizational research, including higher education. Table 3.2 shows each construct and the Cronbach’s Alpha.

Table 3.2  
*The Organizational Culture Assessment Instrument Cronbach's Alpha Score for Higher Education.*

Culture Type	Reliability Score Cronbach's $\alpha$
Clan	.82
Adhocracy	.83
Market	.78
Hierarchy	.67

*Note.* Cronbach's  $\alpha$  values (Cameron & Quinn, 2011).

Kwan and Walker (2004) sought the validity of the competing values model as a tool for differentiating organizations. This study was based on the OCAI instrument administered to all academic staff in seven out of the eight government-funded higher education institutions in Hong Kong. In their review of the literature, Kwan and Walker found that a lack of precision and consensus regarding the definition of organizational culture as well as controversy about empirical or qualitative methods of study. Survey research was commended in the literature for making the lines more defined by assigning value to some of the most conspicuous points. The purpose of the study was to confirm that the competing values can be

used to describe the culture of an organization as well as serve as a basis for differentiating one institution from another. Based on the findings of an instrument administered to all teaching staff in seven higher education institutions in Hong Kong, it was empirically supported that the institutions could be differentiated from one another either on one or a combination of the four cultural types (Clan, Adhocracy, Hierarchy, Market) depicted by the competing values model.

Quinn and Spreitzer (1991), as well as Kwan and Walker (2004), asserted that the Likert-scale was a valid and reliable instrument for assessing organizational culture. Kalliath, Bluedorn, and Gillespie (1999) further supported the validity of the competing values framework by means of structural equation modeling using a set of Likert-scale instruments.

Construct-related validity is “the degree to which an instrument measures an intended hypothetical psychological construct, or non-observable trait” (Fraenkel et al., 2012, p. G-2). A review of construct-related validity revealed the use of double-barreled questions, a construct validity issue in this version of the instrument. By addressing multiple items in one question/response results in unclear variable definitions. Double-barreled questions are cautioned against in research-based surveys (Lavrakus, 2008; Sudeman & Bradburn, 1982). Due to the unconventionality and the use of double-barreled questions the researcher thought it prudent to administer a pilot test for the instrument to increase the precision.

The first pilot was administered as an exact replica of the primary instrument. The instrument was administered to a group of graduate students in the college of education at a local university and a group of high school agriculture teachers. A test-retest methodology was used with each group to test the reliability of the instrument within these populations. According to Frankel et al. (2012) administering the same test twice to the same group can determine if there is a reliable relationship between the two sets of scores. In this case both populations returned a

low response rate of 5%,  $N = 35$ , and the second .06%,  $N = 82$ . Despite the low response rate seven ( $n = 7$ ) participants responded to both the first run of the instrument and the second run of the instrument. Using Pearson's Product correlation each variable was to determine the strength of their relationship between the first and second run of the instrument. Pearson's Product correlation measures the strength of a relationship between two variables (Field, 2015, P. 82) Based on the low response rate and the low ratio of effect size, the researcher modified the questionnaire from an ipsative response scale with double-barreled prompts to a Likert response scale with clearly defined variables, see appendix A. The revised instrument compares present and preferred perceptions using six constructs, Dominant Characteristics, Organizational Leadership, Management of Employees, Organizational Glue, Strategic Emphases, and Criteria of Success (Appendix A).

A second pilot was administered to a population of professional educators at an area K-12 school, using the modified instrument ( $N = 30$ ). In this instance, the researcher was able to administer the instrument in person using paper and pencil. The administration was monitored closely to ensure completion and a chocolate bar was given to those who completed the instrument in an effort to encourage participation. This effort returned a 90% response rate, with 27 of 30 completed instruments returned. Cronbach's coefficient alpha was used to measure the internal consistency of each variable. Reliability expressed as an  $r$  value of  $\pm .70$  is generally accepted to represent good reliability (Litwin, 1995, p. 31). Table 3.4 shows the reliability of each construct and the reliability of the construct when variables with an  $r$  value less than .70 are removed.

Table 3.3  
*Pilot Study to Determine Reliability Within Constructs Using Cronbach's Alpha*

Constructs	Current $\alpha$	With deleted item $\alpha$	Preferred $\alpha$	With deleted item $\alpha$
Dominant Characteristics	.899	.913	.812	.832
Organizational Leadership	.944	.953	.545	.638
Management	.898	.898	.772	.772
Organizational Dynamic	.833	.847	.567	.615
Strategic Emphases	.855	.855	.814	.814
Criteria of Success	.828	.849	.621	.662

Reliability is adequate at  $r \pm .70$  (Litwin, 1995)

Demographic data was needed to create the correlations in objectives #2 and #3. Researcher-developed questions were added as part of the instrument to gather this data. Appendix A shows the demographic questions that was asked to each respondent ( $N \sim 382$ ). Appendix A shows questions specific to an AEPP department needed to address variables in objective #3. Questions in this section asked respondents to give their opinion about enrollment and placement data in the AEPP they are associated with.

## **Population**

According to the American Association of Agricultural Education (AAAE) website, there are 102 universities across the United States that facilitate an educator preparation program in agricultural education. The investigator accessed the faculty directories for each college and university listed on the AAAE website and individually identified potential participants by their job descriptions. The target population was represented by roughly 382 professors, instructors, and administrators who contribute to the instructional function of an agricultural educator preparation program in the United States, based on this inquiry. Those members who agreed to participate in the study will be considered the accepting sample.

## **Analysis**

Understanding organizational culture in AEPPs is important to understanding the effect on program outcomes. These programs all developed a prominent organizational culture, either purposefully or organically. This analysis explored predictor variables that, if significant could be addressed by AEPP departments and used to strengthen the culture of their organization.

The results of the OCAI were analyzed using SPSS software. Reliability analysis was carried out on the perceived and preferred constructs of the four organizational domains comprising eight items. Cronbach's alpha showed the questionnaire to reach acceptable reliability for all constructs. All items appeared to be worthy of retention, resulting in a decrease in the alpha if deleted. As such, no items were removed. The results were used to describe individuals and organizational culture perceived type and preferred type, as well as the strength of the organizational culture within each construct. These data were used to describe the organizational culture and the relationships that exist.



The second research objective looked to determine the amount of variance in the self-perceived strength of organizational culture explained by teacher traits of current students, and teacher traits of recent program completers. A semantic differential scale with bipolar objectives was used to determine teaching traits. The semantic differential measures the attitude toward a particular concept (Fraenkel et al., 2012). Field (2013) recommends using Multiple Regression Analysis (MRA) to predict the values of an outcome from several predictors. MRA was used to test the null hypothesis  $H_0: R^2 = 0$  in the sample, which suggested there would be no variance accounted for in organizational strength predicted by certain or uncertain confidence levels faculty have about program completers and program completers placed as teachers in SBAE programs.

The third research objective looked to determine the amount of variance explained by the strength of the organizational culture, which can be predicted by a linear combination of academic rank and longevity of the instructional faculty at their current institution. Multiple linear regression was used to test the null hypothesis  $H_0: R^2 = 0$  in the sample, which suggested there would be no variance accounted for in organizational strength predicted by the academic rank and longevity of the instructional faculty at their current institution. All analyses of the study's objectives were done using SPSS. Descriptive statistics and were analyzed for commonalities. Table 3.1 describes the analysis that was conducted for each research question. Each research objective required a separate analysis.

## **IRB**

This descriptive/correlational study proposal was submitted and approved by the Texas Tech University Institutional Review Board [IRB], the primary institution for this research, (Appendix B & C). A second IRB application was submitted and approved at Texas A&M as

the secondary institution for this research (Appendix D). Submission to both institution's IRBs will guarantee respect for persons, beneficence, and justice as per the Belmont Report (1978). The instruments were distributed in the fall semester of 2019. At any point in time, those who were involved in the study could choose to discontinue their participation without penalty. All respondents were guaranteed anonymity. Survey results were stored on a password-protected computer, and only the researcher and his advisor had access to the data. All results were reported in summary format, and in no way can any items be traced back to an individual or institution.

### **Timeline**

The timeline for this project was contingent on obtaining Texas Tech University and Texas A&M IRB approval. Two pilot tests were conducted with the Montana agriculture teachers and the teaching staff at a local school. The full instrument was available for responses from March 31 to May 31, 2019. The final instrument was distributed to the target population comprised of approximately 360 professional faculty and staff who contribute to an agriculture educator preparation program in the United States. The distribution list is researcher-developed from 101 universities that support and agricultural EPP in the United States. The target for distribution was August 2019. The participation rate was assessed near the middle of September to determine if the survey needs to be redistributed.

A history threat is an unanticipated and unplanned event that occurs during the course of research being conducted that might affect the responses of the participants (Fraenkel et al., 2012). According to Fraenkel et al. (2012), obtaining more information will help control history threats in social science. In this instance, the researcher administered the instrument with an anonymous link through email. During the time the instrument was administered, hurricane

Dorian, forced the closing of several universities on the east coast, thus interrupting the ability of participants in these institutions to participate in the survey. In an effort to control for this reliability threat, a third solicitation email was administered two weeks after the storm event, allowing faculty at affected institutions to have the opportunity to participate in the survey.

Data collection was closed on September 18, 2019. Data was immediately coded, entered in SPSS, analyzed using both Qualtrics and SPSS.

## **CHAPTER IV**

### **RESULTS**

#### **Purpose and Objectives**

The purpose of this study is to identify and describe the kind and strength of organizational culture that exists among Agricultural Educator Preparation Programs (AEPP) and determine if there is a correlation with program completion and teacher placement. A secondary purpose of this study is to determine if there is a relationship between the organizational culture and the number of years individual faculty have been with the university and the academic rank of the faculty. The objectives of this study were to:

1. Identify AEPP faculty and staff perceptions of organizational culture and relationships between AAAE region, average years of service as a teacher educator, average years in current academic unit, academic rank, current academic role, teaching traits of current students, and teaching traits of recent program completers.
2. Determine the amount of variance in the self-perceived strength of organizational culture explained by the teaching traits of current students, and teaching traits of recent program completers.
3. Ascertain the variance accounted for in strength of organizational culture by the academic rank and longevity of the instructional faculty and staff.

#### **Objective One**

Objective one asked the researcher to identify the perceptions of organizational culture in the agricultural educator preparation programs (AEPP) across the United States and by the AAAE region. The literature revealed that the most common culture type in higher education is the Clan culture (Berrio, 2003; Smart & Hamm, 1993; Smart & St. John, 1996). The literature

also explains that the strength of the organization's culture is related to the effectiveness of an organization (Smart & St. John, 1996). The results of the OCAI questionnaire can be found in Table 4.1. The data regarding the perceived organizational culture indicated that the Clan ( $M = 3.31$ ,  $SD = 1.25$ ), culture was the dominant culture types for AEPP departments ( $n=93$ ). Respondents indicated that the preferred organizational culture was also Clan ( $M = 4.37$ ,  $SD = 0.92$ ). The strength of organizational culture is measured by how closely the perceived and preferred cultures are rated by this sample. For this sample, the culture type that revealed the smallest product between perceived and preferred constructs was the Hierarchy culture ( $\Sigma = 0.60$ ).

Table 4.1

*Characteristics for the Constructs and Strength of Organizational Culture of AEPP in the United States (n = 93)*

	Perceived		Preferred		Strength*
	M	SD	M	SD	Σ
Clan					
Dominant	3.84	1.06	4.35	0.99	
Leadership	3.34	1.18	4.43	0.92	
Management	3.24	1.35	4.27	1.03	
Dynamic	3.31	1.42	4.47	1.09	
Strategic	3.29	1.48	4.42	1.13	
Criteria for success	3.28	1.50	4.31	1.20	
Average	3.31 <sup>2</sup>	1.25	4.37	0.92	1.16
Adhocracy					
Dominant	3.79	1.07	4.47	0.92	
Leadership	3.12	1.12	4.15	0.95	
Management	2.96	1.10	3.78	1.04	
Dynamic	2.92	1.22	4.05	1.07	
Strategic	3.23	1.33	4.02	1.09	
Criteria for success	3.22	1.42	4.11	1.62	
Average	3.12	1.02	4.10	0.88	0.98
Market					
Dominant	3.89	1.07	4.52	0.93	
Leadership	3.63	1.12	4.25	1.00	
Management	3.37	1.24	4.92	1.02	
Dynamic	3.52	1.32	4.18	1.09	
Strategic	2.99	1.34	3.33	1.32	
Criteria for success	2.92	1.24	3.67	1.17	
Average	3.30	1.04	3.98	0.85	0.68
Hierarchy					
Dominant	3.74	1.00	3.91	0.96	
Leadership	3.20	1.26	4.24	1.04	
Management	3.22	1.30	3.53	1.44	
Dynamic	3.23	1.05	3.62	1.12	
Strategic	3.27	1.25	3.87	1.18	
Criteria for success	3.25	1.28	3.93	1.18	
Average	3.25	0.97	3.85	0.93	0.60 <sup>1</sup>

*Note:* <sup>1</sup>= Strongest culture. <sup>2</sup>= Dominant culture type.

Further investigation looked to describe the organizational culture in the AAAE region.

Table 4.2 shows the dominant type of organizational culture for each of the three AAAE regions as well as shows the mean strength for each region. The type of organizational culture is the

average of the mean scores of each of the constructs in a domain. The culture type with a higher average value is considered the preferred organizational culture type. The strength is the product difference between perceived and preferred culture types. The smaller the difference, the stronger the organizational culture (Cameron & Quinn, 2011). Hierarchy ( $M = 3.39$ ) was the dominant perceived organizational culture in the North Central region with Clan ( $M = 4.45$ ) as the dominant preferred culture. The Southern region was dominant in the Market domain for the perceived ( $M = 3.41$ ) and in the Clan domain for preferred ( $M = 4.33$ ) organizational culture. The Western region was also dominant in the Clan domain for both the perceived ( $M = 3.67$ ) and preferred ( $M = 4.65$ ) organizational culture.

Table 4.2

*Dominant Organizational Culture types and strengths by AAAE Region (n = 93)*

Region Culture Type	Perceived		Preferred		*Strength $\Sigma$
	M	SD	M	SD	
North Central (n = 24)					
Clan	3.29	1.07	4.45	0.75	1.16
Adhocracy	3.16	0.75	4.08	0.74	0.92
Market	3.39	0.87	3.90	0.65	0.51
Hierarchy	3.39 <sup>2</sup>	0.73	3.81	0.88	0.42 <sup>1</sup>
Average strength					0.73
Southern (n = 42)					
Clan	3.30 <sup>2</sup>	1.22	4.33	0.90	1.03
Adhocracy	3.21	1.06	4.15	0.89	0.94
Market	3.41	1.08	4.03	0.88	0.62
Hierarchy	3.32	1.02	3.87	0.89	0.55 <sup>1</sup>
Average strength					0.79
Western (n = 26)					
Clan	3.67 <sup>2</sup>	1.03	4.65	0.35	0.98
Adhocracy	3.48	0.77	4.26	0.49	0.78
Market	3.56	0.75	4.20	0.50	0.64 <sup>1</sup>
Hierarchy	3.44	0.64	4.10	0.53	0.66
Average strength					0.77

*Note:* <sup>1</sup>= Strongest culture type. <sup>2</sup>= Prominent culture type.



Respondents were also asked to report their level of academic rank, primary role in their academic unit, the total number of years of service in the profession of agricultural education in higher education, and the total years of service in their current institution. Table 4.3 describes the average years of service along with the average years of service at the current placement by AAAE region and overall (N = 93). The Western region reported the highest average years of service (M = 18.64, n = 26) and highest average at present placement (M = 14.08, n = 26). The overall average years of service is 14.54 (N = 93). The overall average current placement is 10.21 years (N = 93).

Table 4.3  
*Years of service by AAAE region. (N = 93)*

	North Central n=24		Southern n =43		Western n=26		Population N=93	
	M	SD	M	SD	M	SD	M	SD
Average years of service	11.54	7.70	14.81	8.86	18.64	11.57	14.54	9.71
Average years at current placement	8.04	6.70	9.33	7.40	14.08	10.19	10.21	8.36

Table 4.4 shows the professorship is the predominant level of academic rank with 32 (N = 93), and the combination of lecture and researchers is the predominant academic role with 42 (N = 93).

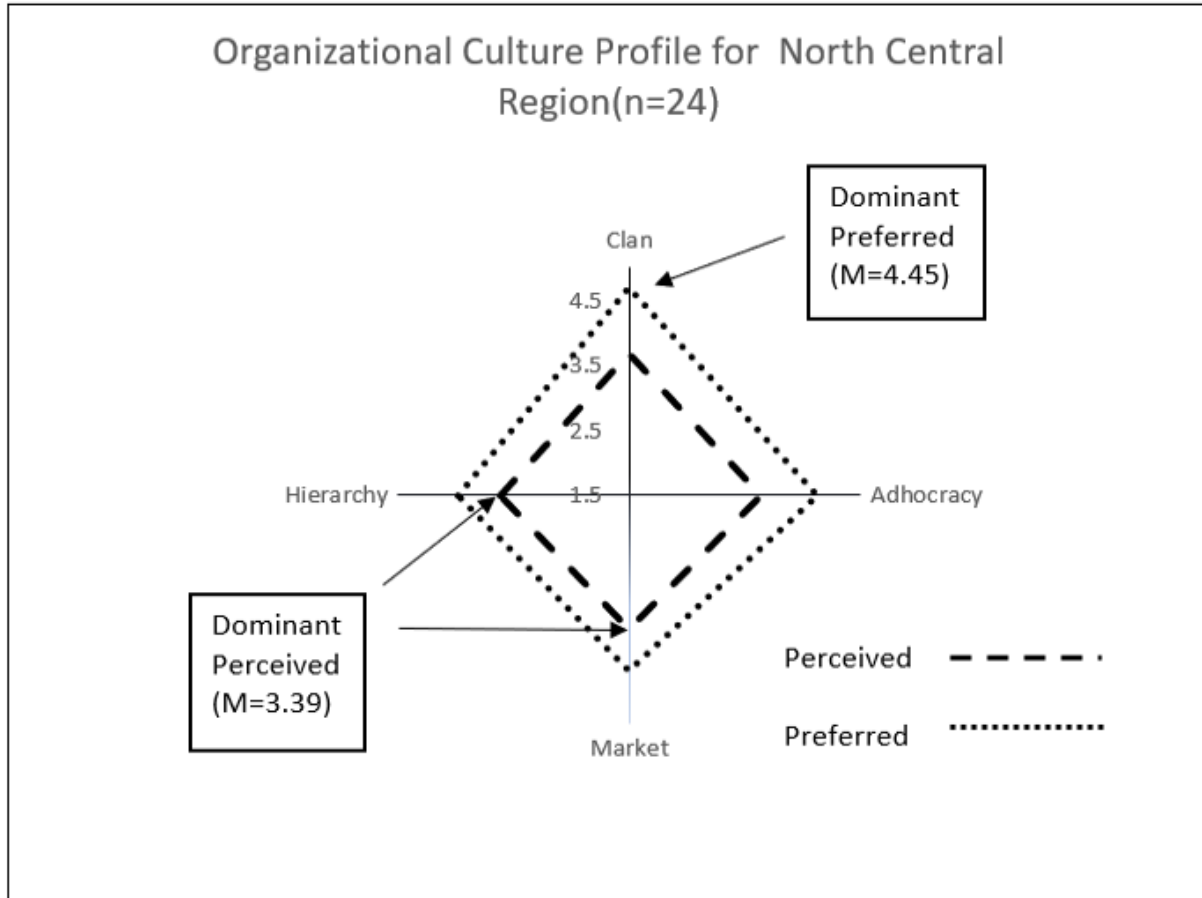
Table 4.4

*Academic rank and academic role by region. (N = 93)*

	North Central n=24	Southern n =43	Western n=26	Population N=93
Academic Rank	<i>f</i>	<i>f</i>	<i>f</i>	<i>f</i>
Professor	3	16	13	32
Associate professor	8	17	3	28
Assistant professor	9	7	5	21
Lecture/instructor	2	2	2	6
Administrator	1	0	0	1
Other	1	1	3	5
Academic Role				
Primarily lecture	7	13	7	27
Primarily researcher	0	2	0	2
Lecture/Research	13	19	10	42
Administrative	3	3	8	14
Other	1	6	1	8

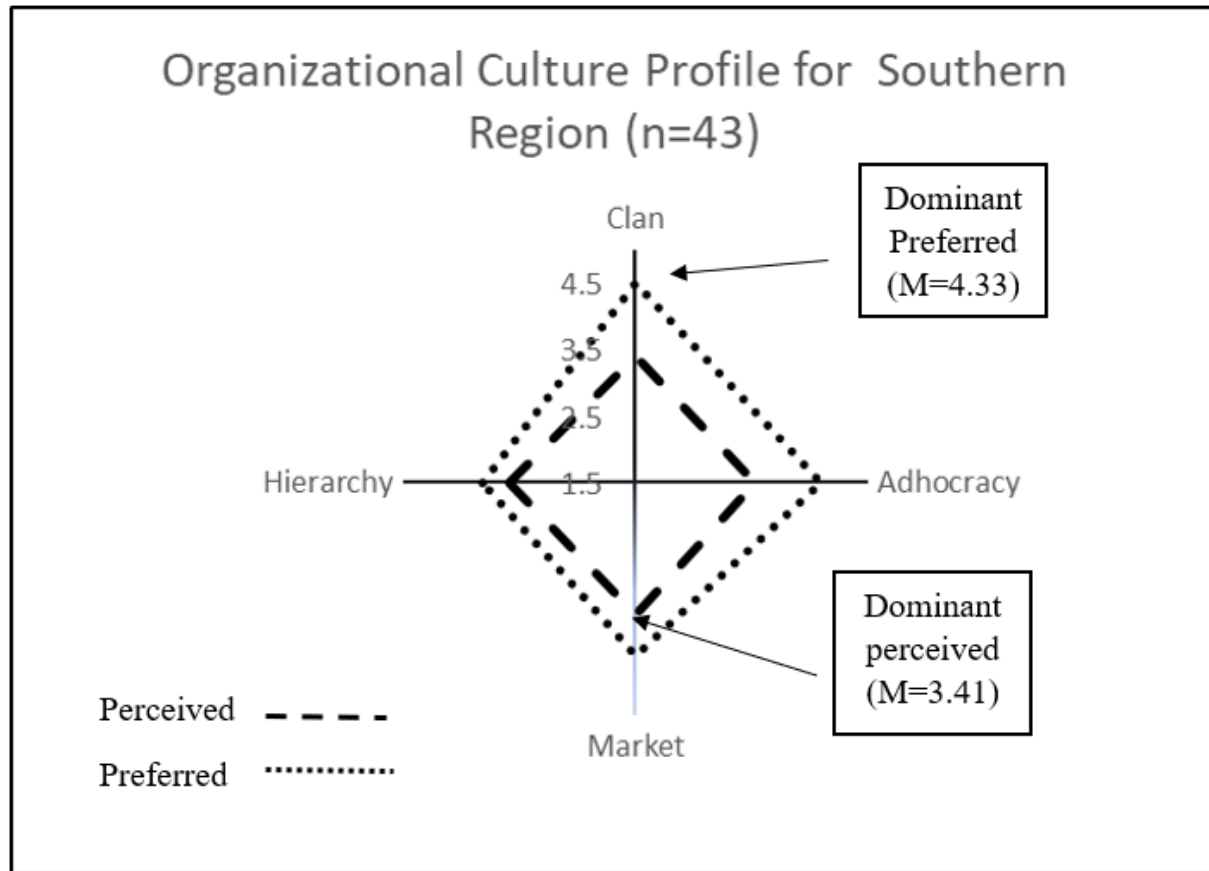
The Organizational Culture Assessment, based on the Competing Values Framework, identifies organizational culture by type and strength. There are four major culture types in Cameron and Quinn's (2011) Competing Values Framework. Each culture type is represented by a quadrant represented in each of the graphs in Figures 4.1, 4.2, 4.3, and 4.4. Mean scores derived from the Organizational Culture Assessment Instrument administered to a volunteer sample of faculty who are associated with educator preparation in agricultural education.

Perceived scores reflect how the individual perceives the culture in their academic unit presently. Preferred scores reflect how the sample would prefer the culture to be in their academic unit. The greater the value of the perceived scores represents the dominant culture type. The more closely the perceived and preferred values come together, the stronger the culture. Neither the culture type nor culture strength represents good or bad dynamics. The following graphs serve as a visual representation of how congruent the perceived model and the preferred model are (Cameron & Quinn, 2011). These visuals help to describe the organizational culture in each AAAE region and overall. In this sample, the preferred values always scored higher than the perceived values. Figure 4.1 shows the dominant culture type of the North-Central region. The graph represents unbalanced visual proximity between the perceived culture and the preferred culture. There are greater differences between the perceived and preferred culture type in the Clan and Adhocracy domains with smaller differences in the Hierarchy and Market culture types. The graph also shows that while the North-Central region perceives to be Hierarchy and Market culture types they clearly prefer the Clan type culture.



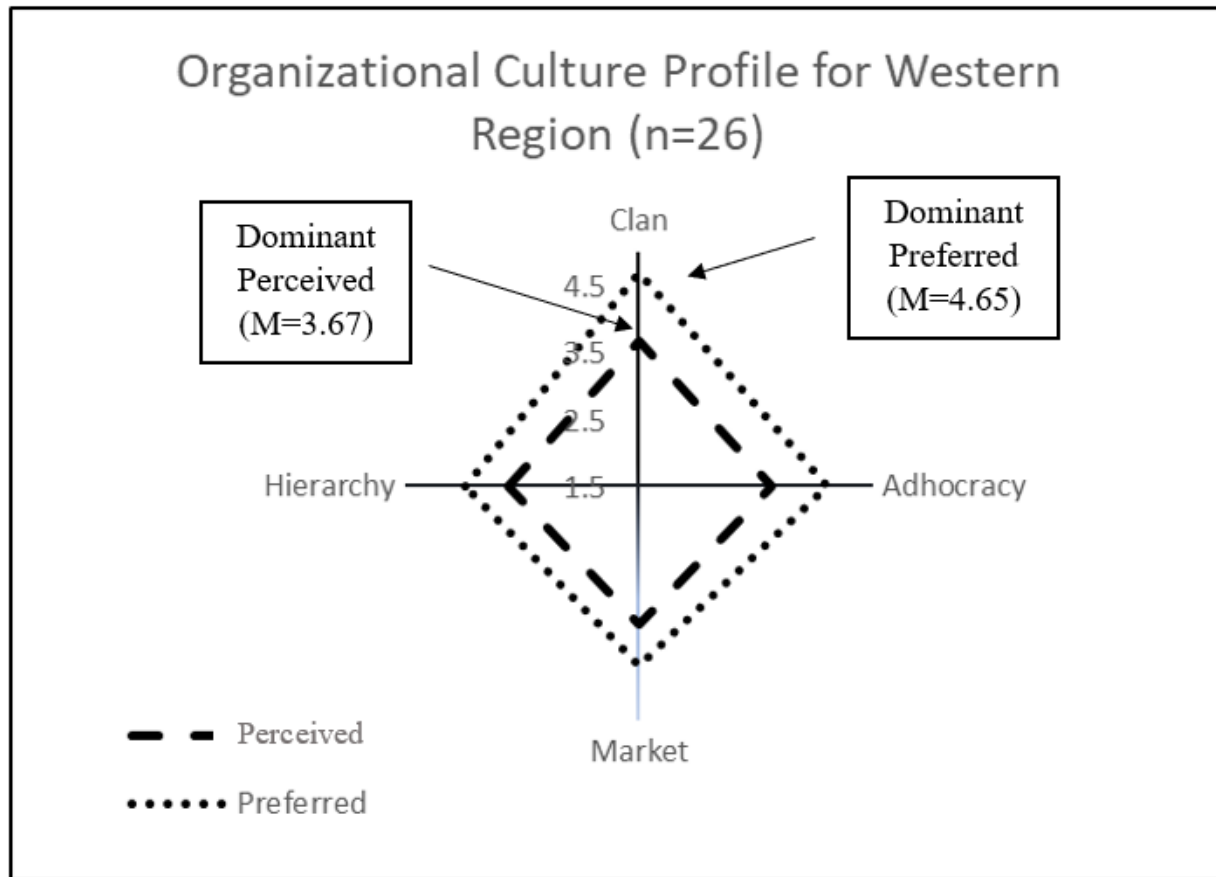
**Figure 4.1.** Perceived culture type in relation to preferred culture type for the North Central AAAE Region.

Figure 4.2 shows the dominant culture type of the Southern region. There distinctly greater differences between perceived and preferred culture types in the Clan, Adhocracy, and Market domains, with a minimal difference comparatively in the Hierarchy domain. While the Market culture type was perceived higher and preferred was higher for Clan, this region shows the most distinct imbalance between perceived and preferred culture types.



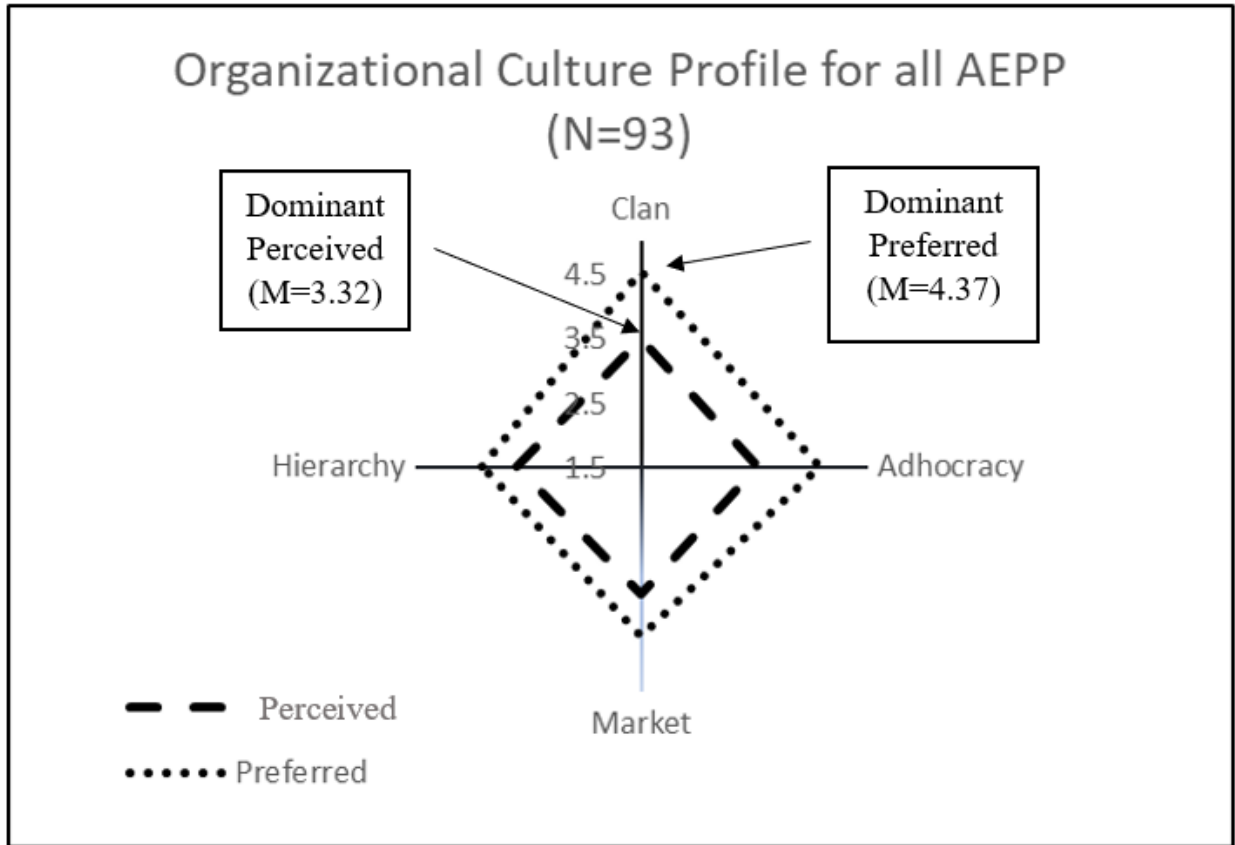
**Figure 4.2.** Perceived culture type in relation to preferred culture type for the Southern AAAE region.

Figure 4.3 shows the dominant culture type of the Western region. This is a more neutral graph with similar differences in all domains. The Clan is the dominant domain for both perceived and preferred culture types.



**Figure 4.3.** Perceived culture type in relation to preferred culture type for the Western AAAE region.

Figure 4.4 shows the dominant culture type of the overall sample. This graph shows that the Clan culture type was dominant for both the perceived and preferred; however, there is a greater margin between perceived and preferred in the Clan domain than elsewhere on the graph. The graph is reasonably balanced but shows there is less of a difference between preferred and perceived in the Market domain.



**Figure 4.4.** Perceived culture type in relation to preferred culture type for all AAAE regions.

## Objective Two

For the second research objective, respondents were asked to acknowledge if they believed their program was producing an adequate number of completers from their AEPP program that were being placed in SBAE programs by indicating the level of certainty versus the uncertainty of those students on a semantic differential scale. The researcher sought to measure the amount of variance in the strength of organizational culture explained by the teacher traits of current students and program completers from the AEPPs.

A Pearson Product Moment correlation yielded a violation of collinearity at  $r = .80$  (Field, 2015), with the program completer variable ( $M = .28$ ,  $SD = 1.27$ ) at  $r = .857$ , which was subsequently

removed from the analysis. Table 4.4 shows descriptive statistics for organizational culture strength as well as current student's teacher traits.

Table 4.5

*Descriptive Statistics: Organizational Culture Strength and Current Student's Teacher Traits (n=94)*

Variable	M	SD
Organizational Culture Strength	0.45	0.30
Student's Teacher Traits	2.56	1.34

The ANOVA revealed that current student's teacher traits had no significant effect on the strength of organizational culture  $F(1, 73) = .241, p = .625$ . Table 4.5 indicates a linear combination of completers and completers placed in SBAE programs explain 0.3% of the variance for organizational culture strength. This effect was not significant at ( $p = .625$ ); therefore, the null hypothesis was accepted.

Table 4.6

*Regression analysis for Organizational Culture strength and Current Student's Teacher Traits (n=94)*

Variables	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P</i>
Constant	1.00	.003	.241	.625
Current Student Teacher Traits	.73	.011		

*Note:  $R^2 = .003$  ( $N = 94$ ,  $p = .625$ ), \*Scale for teacher traits 1 = certainty. 7 = uncertainty.*

### Objective Three

For the third objective, respondents were asked to declare their academic rank and years of service at the institution they are currently employed. Pearson's Product Moment was used to analyze longevity and academic rank to test the collinearity of the combination. This



relationship does not violate multicollinearity ( $p < .001$ ); therefore, both variables were used in the MLR analysis. Table 4.7 shows descriptive statistics for the independent variable cultural strength as well as the dependent variable's longevity and years of service.

Table 4.7  
*Descriptive Statistics: Organizational Culture strength, Longevity and Years of Service (n=94)*

Variable	M	SD
Organizational Culture Strength	0.45	0.30
Longevity	10.10	8.38
Academic rank	2.33	1.40

The researcher sought to ascertain the variance accounted for in strength of organizational culture by academic rank and longevity of the instructional faculty at their current institution. Multiple linear regression was conducted using cultural strength  $F(2, 86) = .999$  as the dependent variable and academic rank and longevity as the independent variable. The analysis explained 2% of the variance and was not statistically significant ( $p = .373$ ), and the null hypothesis was rejected, see Table 4.8.

Table 4.8  
*Regression analysis for organizational culture strength by faculty longevity and academic rank. (N = 93)*

Variables	B	SE B	<i>t</i>	<i>p</i>
Constant	.455	.073	6.24	$P < .001$
Longevity	-.022	.021	-1.06	.291
Academic rank*	-.004	.003	-.151	.202

*Note:*  $R^2 = .023$  ( $N = 93$ ,  $p = .373$ ), \*Ordinal 1 = Professor, 2 = Associate Professor, 3 = Assistant Professor. 4 = Lecture/Instructor, 5 = Administrator, 6 = Other.

## **CHAPTER V**

### **CONCLUSIONS, IMPLICATIONS, AND RECOMMENDATIONS**

#### **Introduction**

The motivation for this research came from a desire to determine if there was a connection between the cultural dynamic in the programs designed to train teachers of agriculture education and the void in supply and demand of qualified teachers. In the last thirty years, agriculture education departments have expanded to focus on more than agriculture and extension education. Degrees in agriculture leadership and in agriculture communications are popular components of these academic units. How has the organizational culture been affected by the expansion of this aspect of the profession? According to Deshpande and Webster (1989), culture develops over a long period of time and is a product of the environment. Organizational culture also has an effect on the curriculum and how policies are administered (Masland, 1985). It only makes sense to question if the academic rank and length of time of service of those engaged in the academic units that train teachers of agricultural education have an effect on the organizational culture within the profession. With the organizational culture described, the possibility of exploring the effect on faculty perceptions of students' teacher traits and completers' teacher traits will be possible.

The purpose of this research was to determine if the above-described relationships do exist and use the data to describe the organizational culture in our profession. The hope is that the information gleaned from this study will help the profession develop strong cultures that flourish and yield teachers of agriculture.

In this study, the researcher used both descriptive and correlational methods to gather quantitative data for this non-experimental study. The data was used to describe the organizational culture and develop an understanding of the phenomenon of organizational

culture in AEPPs. The intention was to provide descriptions of organizational culture in this unique population and describe how variables of interest predict culture types and strengths. The results and connotations of this study are based on the following objectives:

1. Identify AEPP faculty and staff perceptions of organizational culture and relationships between AAAE region, average years of service as a teacher educator, average years in current academic unit, academic rank, current academic role, teaching traits of current students, and teaching traits of recent program completers.
2. Determine the amount of variance in the self-perceived strength of organizational culture explained by the teaching traits of current students, and teaching traits of recent program completers.
3. Ascertain the variance accounted for in strength of organizational culture by seniority and longevity of the instructional faculty and staff.

Findings indicate that in terms of academic rank, a majority of the individuals who responded to this survey were professors (32, N = 93), followed closely by associate professors and assistant professors (28, N = 93) and (21, N = 93), respectively. Most revealed their academic role as both lecturer and researcher (42, N = 93). Findings also show that the average years of service was 14.54 years and that the average years of at a current institution was 10.21 years. These results illustrate that the profession is dominated by veteran professors who are academically qualified and have ample experience. The North-Central AAAE region represented the lowest average longevity with 11.54 years of experience and 8.04 at their current institution (n = 24). The North-Central region also reported the least number of professors and associate professors at three and eight respectively. The Western region recorded the highest average years of service at 18.64 and 14.08. Of the 26 respondents, 13 were professors. The

Southern region had the highest number of participants at 43. The average years of service and longevity at their current institution was 14.81 years and 9.33 years. The Southern region also boasts the highest percentage of professors and associate professors at 77% ( $n = 43$ ).

The results agree with past research, which suggests that the Clan culture type dominates higher education (Berrio, 2003; Smart & Hamm, 1993; Smart & St. John, 1996). The Clan culture type is defined as seeming more like an extended family while the Market culture type is focused on conducting transactions, competitiveness, and productivity (Cameron & Quinn, 2011). Respondents also indicated they prefer the Clan culture type overall. When broken down by region the North Central region with average years of service of almost 12 years and mostly assistant professors perceived their culture to be more Market and Hierarchy type. The southern region with the highest number of professors and associate professors and an average of 15 years of service identified more closely with the Market type culture. The Western region had the highest average years of service at almost 19, and the highest average of professors related more closely to the Clan culture type. The Clan culture, however continues to dominate as the preferred type of culture in all three regions.

For the purposes of this research, the strength of the organizational culture is measured by how closely the perceived and preferred means came together (Sorensen, 2001). The North-Central region produced the lowest mean score for strength ( $\mu = 0.73$ ). The Southern and Western regions were  $\mu = 0.79$  and  $77$ . We must not overlook how uniformly the perceived and preferred cultures match in all four domains. Figures 4.1, 4.2, 4.3, and 4.4 demonstrate that while one culture type may dominate or be stronger, the overall fit may be related to the longevity and academic rank of the faculty. The Western region is the best representation of this type of uniformity.

The second objective was to determine the amount of variance in cultural strength, which could be predicted by faculty perceptions of an adequate number of completers placed in SBAE programs moderated by the number of program completers. At the mean value of completers, there was a non-significant effect between cultural strength and completers and completers placed in SBAE programs ( $p = .625$ ). This result indicates that the cultural strength of an academic unit cannot be predicted by variables such as students completing the program and completers placed as teachers in SBAE programs.

The third objective was to determine the amount of variance in cultural strength, which could be predicted by faculty academic rank and longevity. At the mean value of academic rank and longevity, there was a non-significant relationship between cultural strength and academic rank and longevity. This finding goes against what is assessed from prior research suggesting that culture is a product of practices over time. Time can be related to the level of academic rank (professors and associate professors) combined with an average length of service greater than ten years. Further investigation of this topic could lead to more definitive results.

Even though the strength of the organizational culture in an academic units cannot be described by faculty longevity and years of service nor teacher characteristics, other variables such as the size of the institution, specific policies, and practices could lead to more decisive conclusions.

### **Recommendations for Practice**

The following recommendations for practice were derived from the conclusions and implications of this study.

Warmbrod (2010) stated that “preparing and enhancing the advancement of teachers is the grand strategy facing faculty who are specialists in agricultural education” (p. 292). The

shortage of qualified agriculture teachers continues to be a topic of concern. While the world is changing around us, so is education, our audience, and the way we perceive our profession. Evidence in this research suggests that the majority of those in our profession has been around long enough to see these dramatic changes and at the same time, develop the foundation for culture within their programs. Evaluating the organizational culture of the academic units that prepare and advance teachers into SBAE programs is important to developing policies, practices, and curriculum that will benefit a changing population.

Evidence in this research suggests that the strength of organizational culture is not related to outcomes such as program completers and completers who advance to teaching. Studying the exchange between cultural strength and performance variability will, therefore, shed insight into the capacity to conform to change (Sorensen, 2001). Organizations such as those in higher education must continually assess the community within their academic unit in order to remain insightful and responsive to change.

The culture and environment of a department will entice incidental learning concerning knowledge, insights, and perspectives gained through immersion in the culture of the academic department (Mars, 2016). While Hierarchy was a dominant characteristic, research indicates that the Clan domain is more suitable in education. Using the OCAI and the Competing Values Framework can help academic units to lead their departments to a stronger Clan type culture, which is more relationship-oriented than the Hierarchy type.

Evidence in the review of literature shows AEPP's may have cultural dynamics such as admission protocols that ostracize potential agricultural education teachers along with the strong hierarchical influences implicated in this research. Understanding how the cultural influences of

the policies, practices and protocols that have developed over time can help us understand potential roadblock that may be inhibiting recruitment and retention efforts.

The National Teach Ag Campaign launched the State Teach Ag. Results (STAR) program in 2014 to increase the recruitment and retention at the state level. Programs such as this have been successful in helping to change the culture in academic units by creating a venue where partnerships can be developed between the universities, teacher associations, state associations, and state government in an effort to direct more effort into advancing teachers into agriculture education.

### **Recommendations for Research**

Exploring organizational culture is another means of learning more about colleges and universities. The perspective of cultural influences supplements traditional approaches to education. It may further explain the variations found among colleges and universities. Further investigation of organizational culture is needed to uncover its specific influence on the college and university campus (Masland, 1985, p. 167).

1. Although the concept of organizational culture in higher education is not new (Masland, 1985), the study of organizational culture in higher education is fairly young and unexplored, especially in agricultural education. Research is needed in agricultural education, which explores dynamics that could better prepare students to be agriculture teachers in all institutions with AEPP's.
2. College campuses have plenty of research on recruiting and retaining students. Little investigation has been related to the combined effect of campus ethos and the dynamics of interdepartmental organizational culture in agricultural education. Philosophy, protocol, policies, practices, are directly related to the organizational

- culture (Smart & St. John, 1996). Research is needed which will show how the dynamics of campus ethos are influenced by the organizational culture of the academic units in higher education, especially in agriculture. Studies of this nature would allow for the development of student-centered programing which meets the to work with students in developing programming that is student-centered yet meets the academic and institutional demands of higher education.
3. Academic units responsible for advancing students to be teachers in SBAE programs are departments of overarching colleges of agriculture and education. Based on the groundwork of this study, it is recommended that further research of the qualitative nature be combined with this descriptive data to describe further and draw a picture of the organizational culture dynamic that exists in agricultural education as well as other units within the same college. Information of this nature will allow practitioners to draw conclusions and make informed decisions that will allow them to positively guide and influence the organizational culture within their academic units.
  4. The research in this study shows there is no evidence the relates certain outcome variables to the strength of the organizational culture. There are yet factors to be explored that contribute to an academic unit's efficiency in advancing students to be teachers in SBAE programs. It is recommended that researchers continue to explore the organizational culture of academic units that are responsible for a higher number of completers as compared to units with lesser numbers of completers. Are these organizations similar in type and strength, and do these variables contribute to efficiency? Are the values and missions similar between academic unit?



## **SUMMARY**

The study of organizational culture can reveal circumstances, if replicated, can enhance the dynamics in similar organizations to improve practices. Even though the research in this study does not explain how the kind and strength of organizational culture affect students' and completers' teacher traits, it does open the door to further exploration of the influence of organizational culture on other program outcomes. Implications of the inquiry in this study summarize how the cultural strength of an academic unit can influence our perceptions of the demand for agriculture teachers are met. The conclusions did not statistically show the influence of a profession with a veteran faculty; however one would believe that the longevity and academic rank of the faculty would over time have a significant influence. The data did show that although the perceived Clan culture was the more dominant culture dynamic overall, two of the three regions, North Central and Southern perceived their culture to be Hierarchy. One can only conclude that even though this sample of the profession agriculture educators is concerned with the people in their organization, they live in a competitive world of policies and practices where rules are important. The data also showed that overall, the Clan type was the preferred culture type indicating faculty covet a friendly environment where people share a lot of themselves. With research such as this, the profession of AGED can continue to explore influences on the cultural dynamics of their institutions, when addressed will help strengthen and increase the supply of qualified agriculture education teachers in SBAE programs across the nation.

## REFERENCES

- Amondson, C. (2019, April 10). The Demand for educators. Retrieved from <https://www.collegechoice.net/demand-for-educators/>
- Barrick, R. K., & Garton, B. L. (2010). Frameworks for agriculture teacher education. In R. M., Torres, T., Kitchel & A. L., Ball, (2010), *Preparing and advancing teachers in agricultural education*. Columbus, OH: Curriculum Materials Service.
- Berio, A. A. (2003). An organizational culture assessment using the competing values framework: a profile of Ohio State University Extension. *The Journal of Extension*, 41(2). doi:<https://joe.org/joe/2003april/a3.php>
- Birkenholz, R. J., & Deeds, j. (2010). National standards for teacher education in agriculture. In R. M., Torres, T., Kitchel & A. L., Ball (2010), *Preparing and advancing teachers in agricultural education*. Columbus, OH: Curriculum Materials Service.
- Cameron, K. S. (1978). Measuring organizational effectiveness in institutions of higher education. *Administrative Science Quarterly* 23, (604-632).
- Cameron, K. S. (1988). The conceptual foundations of organizational culture. In D. R. Ettington. (Eds.) *V Higher education: Handbook of theory and research* (p. 356–96). New York: Agathon.
- Cameron, K. S., & Quinn, R. E. (2011). *Diagnosing and changing organizational culture: Based on the competing values framework*. San Francisco, CA: Jossey-Bass.
- Deshpande, R., & Webster, F. E. (1989). Organizational culture and Marketing: Defining the research agenda. *Journal of Marketing*, 53(1), 3-15. doi:10.2307/1251521
- Doerfert, D. L., (2011). *National research agenda*. American Association for Agricultural Education's research priority areas for 2011-2015. Lubbock, TX: Texas Tech University, Department of Agricultural Education and Communications.
- Field, A. P. (2015). *Discovering statistics using IBM SPSS Statistics* (4th ed.). Thousand Oaks, CA: SAGE.
- Lawver, R. G., Foster, D. D, & Smith, A. R. (2018). Status of the U. S. Supply and Demand for Teachers of Agricultural Education, 2014-2016, retrieved from <http://aaaonline.org/Teacher-Supplyand-Demand>.
- Fraenkel, J. R., Wallen, N. E., & Hyun, H. H. (2012). *How to design and evaluate research in education* (8th ed.). New York, New York: McGraw-Hill Education.
- Fralinger, B., & Olson, V. (2007). Organizational culture at the university level: A study using the OCAI instrument. *Journal of College Teaching & Learning (TLC)*, 4(11), 85-97. doi:10.19030/tlc.v4i11.1528

- Freeman, T. M., Anderman, L. H., & Jensen, J. M. (2007). Sense of belonging in college freshmen at the classroom and campus levels. *The Journal of Experimental Education*, 75(3), 203-220.
- Gayle, D. J., Tewarie, B., & White, A. Q. (2011). *Governance in the twenty-first-century university: Approaches to effective leadership and strategic management* (1st ed., Vol. 30, pp. 41-49). San Francisco, CA: Jossey-Bass.
- Groves, R. M., Cialdini, R. B., & Couper, M. P. (1992). Understanding the decision to participate in a survey. *Public Opinion Quarterly*, 56(4), 475-491. doi:10.1086/269338
- Helfrich, C. D., Li, Y., Mohr, D. C., Meterko, M., & Sales, A. E. (2007). Assessing an organizational culture instrument based on the competing values framework: Exploratory and confirmatory factor analyses. *Implementation Science*, 2(1), 1-14. doi:10.1186/1748-5908-2-13
- Hughes, M., & Barrick, R. K. (1993). A model for agricultural education in public schools. *Journal of Agricultural Education*, 34(3), 59-67. doi:10.5032/jae.1993.03059
- Irlbeck, E., Adams, S., Akers, C., Burris, S., & Jones, S. (2014). First generation college students: Motivations and support systems. *Journal of Agricultural Education*, 55(2), 154-166. doi:10.5032/jae.2014.02154
- Kalliath, T., Bluedorn, A., & Gillespie, D. (1999). A confirmatory factor analysis of the competing values instrument. *Educational and Psychological Measurement*, 59(1), 143-158. doi:10.1177/00131649921969668
- Kantrovich, A. J., (2007). A national study of the supply and demand for teachers of agricultural education from 2004-2006. *American Association for Agricultural Education*. Retrieved from <http://www.naae.org/teachag/2010%20AAAE%20Supply%20Demand%20Study.pdf>.
- Klein, S., & Washburn, S. (2012). A case study of the search phase of college choice as experienced prospective students visiting a Midwest college of agriculture. *NACTA Journal*, 56(4), 63.
- Kwan, P., & Walker, A. (2004). Validating the competing values model as a representation of organizational culture through inter-institutional comparisons. *Organizational Analysis*, 12(1), 21-37doi:10.1108/eb028984
- Krober, A. L., & Klucichohn, C. (1952). Culture a critical review of concepts and definitions. *Peabody Museum of American Archeology and Ethnology, Harvard University*, 48(1).
- Lamond, D. (2003). The value of Quinn's competing values model in an Australian context. *Journal of Managerial Psychology*, 18(1), 46-59. doi:10.1108/02683940310459583

- Lavrakas, P. J. (2008). *Encyclopedia of survey research methods*. Thousand Oaks, CA: SAGE Publications. doi: 10.4135/9781412963947
- Lawver, R. G., Foster, D. D., & Smith, A. R. (2018). *Status of the U. S. Supply and Demand for Teachers of Agricultural Education (2014-2016)*. doi:<http://aaaeonline.org/Teacher-Supply-and-Demand>.
- Litwin, M. S. (1995). *How to Measure Survey Reliability and Validity*. Thousand Oaks, CA, CA: SAGE Publications.
- Mars, M. M. (2016). The meaning and relevancy of innovation and entrepreneurship: An exploration of agriculture teacher preparation and perspectives. *Journal of Agricultural Education*, 57(3), 55-69. doi: 10.5032/jae.2016.03055
- Martin, J., & Siehl, C. (1983). Organizational culture and counterculture: An uneasy symbiosis. *Organizational Dynamics*, 12(2), 52-64. doi:10.1016/0090-2616(83)90033-5
- Masland, A. T. (1985). organizational culture in the study of higher education. *The Review of Higher Education*, 8(2), 157-168. doi:10.1353/rhe.1985.0026
- McKim, B., Rutherford, T., Torres, R., & Murphy, T. (2011). Organizational climate of the American Association for Agricultural Education. *Journal of Agricultural Education*, 52(3), 87-99. doi:10.5032/jae.2011.03087
- McLean, R. C., & Camp, W. G., (2000). An examination of selected preserve agricultural teacher education programs in the United States. *Journal of Agricultural Education*, 41, (2), 25-35. doi:10.5032/jae.2000.02025
- Mouton, M., Plaut, T., & Strong C., (2009, October). *College Guide for Department Chairs*. Retrieved From <http://www.cornellcollege.edu/academic-affairs/chair-Handbook/departmental-cultures-and-chair-styles.shtml>
- Myers, B. E., & Dyer, J. E., (2004). Agriculture teacher education programs: A synthesis of literature. *Journal of Agricultural Education*, 45,(3), 44-52. doi:10.5032/jae.2004.03044
- Northouse, P. G. (2016). *Leadership: Theory and practice* (7th ed.). Thousand Oaks, CA: SAGE Publications.
- Quinn, R. E., & Spreitzer, G. M. (1991). The psychometrics of the competing values culture instrument and an analysis of the impact of organizational culture on quality of life. *Research in Organizational Change and Development*, 5, 115-142.
- Roberts G. T., & Dyer J. E., (2004). Characteristics of effective agriculture teachers. *Journal of Agricultural Education*, 45, (4), 82-95. doi:10.5032/jae.2004.04082

- Roberts, T. G., Kitchel, T. (2010). Designing professional knowledge curriculum and instruction. In R. M. Torres, T. Kitchel, & A. L. Ball (Editors), *Preparing and advancing teachers in agricultural education* (pp. 100-111). Columbus, OH: Curriculum Materials Service.
- Saffold, G. S. (1988). Culture traits, strength, and organizational performance: Moving beyond "strong" culture. *The Academy of Management Review*, 13(4), 546-558. doi:10.2307/258374
- Schein, E. H. (1990). Organizational culture. *American Psychologist*, 45(2), 109-119.
- Schein, E. H. (1992). *Organizational culture and leadership* (2nd ed). San Francisco: Jossey-Bass.
- Schein, E. H. (1996). Culture: The missing concept in organization studies. *Administrative Science Quarterly*, 41(2), 229-240. doi:10.2307/2393715
- Shinn, G., & Baker, M. (2010). Graduate program design. In R. M. Torres, T. Kitchel, & A. L. Ball (Editors), *Preparing and Advancing Teachers in Agricultural Education* (pp. 157-175). Ohio State University, OH: Curriculum Materials Service.
- Smart, J. C., & Hamm, R. E. (1993). Organizational effectiveness and mission orientations of two-year colleges. *Research in Higher Education*, 34(4), 489-502. doi:10.1007/bf00991856
- Smart, J. C., & St. John, E. P. (1996). Organizational culture and effectiveness in higher education: A test of the "culture type" and "strong culture" hypotheses. *Educational Evaluation and Policy Analysis*, 18(3), 219-241. doi:10.3102/01623737018003219
- Smith-Hollins, C., Elbert, C., Baggett, C., & Wallace, S. (2015). Factors influencing enrollment in colleges of agriculture: Perspectives of students in 1862 land grant institutions. *NACTA Journal*, 59(4), December.
- Sorensen, J. B. (2002). The strength of corporate culture and the reliability of firm performance. *Administrative Science Quarterly*, 47(1), 70-91. doi:10.2307/3094891
- Stripling, C. T., & Richetts, J. C. (2016). Sufficient Scientific and Professional Workforce That Addresses the Challenges of the 21st Century. In T. G. Roberts, A. Harder, & M. T. Brashears (Authors), *American Association for Agricultural Education national research agenda: 2016-2020* (pp. 30-39). Gainesville, FL: Department of Agricultural Education and Communication.
- Strong, R., & Williams, J. (2014). Understanding students as followers: Discovering the influence of followership style on self-directed learning. *Journal of Agricultural Education*, 55(2), 201-213. doi:10.5032/jae.2014.02201

- Sudman, S., & Bradburn, N. M. (1982). *Asking questions*. San Francisco: Jossey-Bass.
- Thakar, A. (2010). The Competing values framework for growth strategy. *The Dealmaker's Journal*, 45(1), 1-4.
- Thieman, D.G., Rosch, D. M., & Suarez, C. E. (2016). Consideration of agricultural education as a career: A statewide examination by high school class year of predicting factors. *Journal of Agriculture Education*, 57(4), 29-43. Doi: 10.5032/2016.04029
- Tierney, W. G. (1988). Organizational culture in higher education: Defining the essentials. *The Journal of Higher Education*, 59(1), 2-21. doi:10.2307/1981868
- U.S. Department of Education; Part 686 *et seq.* (2018)
- Wilkins, A. L., & Ouchi, W. G. (1983). Efficient cultures: Exploring the relationship between culture and organizational performance. *Administrative Science Quarterly*, 28(3), 468-481. doi:10.2307/2392253
- Warmbrod, R. J. (2010), In R. Torres, T. Kitchel & A. Ball (Authors) Preparing and advancing teachers in agricultural education (292). Columbus, OH: Curriculum Materials Service.
- Yu, T., & Wu, N. (2009). A review of study on the competing values framework. *International Journal of Business and Management*, 4(7), 37-41. doi:10.5539/ijbm.v4n7p37

## **APPENDICIES**

### **APPENDIX A OCAI INSTRUMENT**

# Organizational Culture Assessment in Agriculture Educator Preparation Programs (revised)

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## Start of Block: Introduction

### INTRO Introduction

Thank you in advance for taking the time to complete this instrument. My name is Dan Johnston and I am a doctoral candidate in a joint Ed.D. (Educational Doctorate) program at Texas Tech and Texas A&M. The goal of my research is to gain and share knowledge within the agricultural education profession that will help us better understand the influence of organizational culture on selected program inputs and outcomes. This instrument will take ~15-minutes for you to complete. Anonymity is important, particularly in programs with a small group of faculty. Neither you nor your institution will be identified in the reporting of the data and findings from this research. The survey will be administered and the data collected by Qualtrics Survey Software Company. Only raw data with no identifying factors will be provided to the research team. Please see the IRB informed consent form for further details.

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Qualifier: Please answer the following question to determine if you qualify for the target population of this study.

I participate and/or contribute to the instructional function of educator preparation/certification in agriculture in a college or university in the United States.

☐ Yes (1)

☐ No (2)

*Skip To: End of Survey If Please answer the following question to determine if you qualify for the target population of thi... = No*

---

CONSENT Informed Consent Form What is this project studying? The study is called: "THE ORGANIZATIONAL CULTURE OF AGRICULTURAL EDUCATION PREPARATION PROGRAMS IN RELATION TO TEACHER PLACEMENT IN SCHOOL-BASED



AGRICULTURAL EDUCATION." This study will be administered through Qualtrics research software. A modified version of the "Organizational Culture Assessment Instrument" (OCAI) developed by Cameron and Quinn (2011) will be used to assess the type and magnitude of organizational culture. What would I do if I participate? You will complete and submit the Organizational Cultural Assessment Instrument and demographic questions on the Qualtrics survey software platform. How long will the survey take? We are asking for 15 minutes of your time. Can I quit if I become uncomfortable? Completing this survey is your choice. You can quit at any time by exiting the survey. The survey will only be submitted if you click on the submit prompt at the end of the survey. How are you protecting my privacy? Rest easy, I am using Qualtrics as a third-party survey administrator. All data will be collected anonymously by Qualtrics. The research team will not know if you participated in the survey. Because we are using an anonymous link, the data cannot be associated with you or the institution you are associated with. Data will be reported by the AAAE region as you report it. Are there any risks to me? There is no health, social or professional risks to taking this survey. How will I benefit from participating? You might find the research interesting. You might feel good about helping with research. Results from this research may help us understand the dynamics of organizational culture within our profession. I have some questions about the study. Who can I ask? Dr. Steve Frazee is the principal investigator at Texas Tech University (806-742-2816). Danny L. Johnston at Texas Tech University is the co-investigator in charge of the study. If you have questions, you can call him at (406) 363-4891TTU also has a Board that protects the rights of people who participate in research. You can ask them questions at (806) 742-2064. You can also mail them at Institutional Review Board for the Protection of Human Subjects, Office of the Vice President for Research, Texas Tech University, Lubbock, Texas 79409.

☐ I agree (1)

☐ I do not agree (2)

*Skip To: End of Survey If Informed Consent Form What is this project studying? The study is called: "THE ORGANIZATIONAL CUL... = I do not agree*

**End of Block: Introduction**

---

**Start of Block: Begin the Survey**

#### INSTRUCTIONS Begin Survey

The following six categories of questions ask you to identify the way you experience your academic unit/program in teacher certification currently, and, the way you would prefer the organization to be.

Following are a series of Likert-type statements which refer to the agriculture educator preparation program or the academic unit you contribute to.

First-rate how you perceive your academic unit to be currently.

The succeeding question will ask you to rate your academic unit again according to how you would prefer the organization to be if it is to accomplish its highest objectives and achieve

spectacular success.

For the purposes of this survey, the scale in the following questions does not represent positive or negative results only your perceptions of the organizational culture within your academic unit.

**End of Block: Begin the Survey**

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**Start of Block: Part 1: Organizational Culture Assessment**

**1A Current Culture DOMINANT CHARACTERISTICS of your organization.:** Select the option that best represents how you feel about the organization of your academic unit **CURRENTLY**.

	Strongly disagree (1)	Disagree (2)	Uncertain (3)	Agree (4)	Strongly agree (5)
There is a sense of belonging within the organization. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The organization is like an extended family. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The organization is dynamic. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The organization is results-oriented. (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The organization is structured. (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The organization is controlled. (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

1B

**Preferred Culture**

**DOMINANT CHARACTERISTICS of your organization:**

Select the option that best represents how you would **prefer** the organization of your academic unit to be.

	Strongly disagree (1)	Disagree (2)	Uncertain (3)	Agree (4)	Strongly agree (5)
There is a sense of belonging within the organization. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The organization is like an extended family. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The organization is dynamic. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The organization is results-oriented. (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The organization is structured. (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The organization is controlled. (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

2A

**Current Culture**

**ORGANIZATIONAL LEADERSHIP within the organization :** Select the option that best represents how you feel about the **LEADERSHIP** in your academic unit **CURRENTLY**.

	Strongly disagree (1)	Disagree (2)	Uncertain (3)	Agree (4)	Strongly agree (5)
The leadership in the organization exemplifies mentoring. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The leadership in the organization exemplifies nurturing. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The leadership in the organization exemplifies innovation. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The leadership in the organization exemplifies risk-taking. (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The leadership in the organization exemplifies a results-oriented focus. (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

2B

**Preferred Culture**

**ORGANIZATIONAL LEADERSHIP within the organization:**

Select the option that best represents how you would **prefer** the LEADERSHIP in your academic unit to be.

	Strongly disagree (1)	Disagree (2)	Uncertain (3)	Agree (4)	Strongly agree (5)
The leadership in the organization exemplifies mentoring. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The leadership in the organization exemplifies nurturing. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The leadership in the organization exemplifies innovation. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The leadership in the organization exemplifies risk-taking. (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The leadership in the organization exemplifies a results-oriented focus. (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

3A

**Current Culture**

**MANAGEMENT of the organization.:**

Select the option that best represents how you feel about the MANAGEMENT in your academic unit CURRENTLY.

	Strongly disagree (1)	Disagree (2)	Uncertain (3)	Agree (4)	Strongly agree (5)
The management style in the organization is characterized by teamwork (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The management style in the organization is characterized by consensus. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The management style in the organization is characterized by individual risk-taking. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The management style in the organization is characterized by uniqueness. (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

3B

**Preferred Culture**

**MANAGEMENT of the organization.:** Select the option that best represents how you would **prefer** the MANAGEMENT in your academic unit to be.

	Strongly disagree (1)	Disagree (2)	Uncertain (3)	Agree (4)	Strongly agree (5)
The management style in the organization is characterized by teamwork (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The management style in the organization is characterized by consensus. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The management style in the organization is characterized by individual risk-taking. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The management style in the organization is characterized by uniqueness. (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

4A

**Current Culture**

The organizational **DYNAMIC of the organization:**

Select the option that best represents how you feel about the **DYNAMIC** in your academic unit **CURRENTLY**.

	Strongly disagree (1)	Disagree (2)	Uncertain (3)	Agree (4)	Strongly agree (5)
The dynamic that holds the organization together is mutual trust. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The dynamic that holds the organization together is a commitment to modernization. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The dynamic that holds the organization together is an emphasis on being on the cutting edge. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The dynamic that holds the organization together is the emphasis on goal accomplishment. (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The dynamic that holds the organization together is formal policies. (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The dynamic that holds the organization together is maintaining a smooth-running organization. (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



4B

**Preferred Culture**

The organizational DYNAMIC **of the organization:** Select the option that best represents how you would prefer the DYNAMIC in your academic unit to be.

	Strongly disagree (1)	Disagree (2)	Uncertain (3)	Agree (4)	Strongly agree (5)
The dynamic that holds the organization together is mutual trust. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The dynamic that holds the organization together is a commitment to modernization. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The dynamic that holds the organization together is an emphasis on being on the cutting edge. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The dynamic that holds the organization together is the emphasis on goal accomplishment. (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The dynamic that holds the organization together is formal policies. (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

5A

**Current Culture**

**STRATEGIC EMPHASES of the organization:** Select the option that best represents how you feel about the STRATEGIC EMPHASES in your academic unit CURRENTLY.

	Strongly disagree (1)	Disagree (2)	Uncertain (3)	Agree (4)	Strongly agree (5)
High trust is emphasized within the organization. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Openness is emphasized within the organization. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Acquiring new resources is emphasized within the organization. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Creating new challenges is emphasized by the organization. (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Competitive actions is emphasized within the organization. (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Permanence is emphasized within the organization. (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Stability is emphasized within the organization. (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

5B

**Preferred Culture**

STRATEGIC EMPHASES of the organization: Select the option that best represents how you **prefer** the the STRATEGIC EMPHASES in your academic unit to be.

	Strongly disagree (1)	Disagree (2)	Uncertain (3)	Agree (4)	Strongly agree (5)
High trust is emphasized within the organization. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Openness is emphasized within the organization. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Acquiring new resources is emphasized within the organization. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Creating new challenges is emphasized by the organization. (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Competitive actions is emphasized within the organization. (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Permanence is emphasized within the organization. (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Stability is emphasized within the organization. (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

6A

**Current Culture**

**CRITERIA OF SUCCESS of the organization:** CURRENTLY Select the option that best represents how you feel about the CRITERIA OF SUCCESS in your academic unit CURRENTLY.

	Strongly disagree (1)	Disagree (2)	Uncertain (3)	Agree (4)	Strongly agree (5)
Success in the organization is defined by the concern for people. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Success in the organization is defined by having innovative programs. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Success in the organization is defined by a winning attitude. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Success in the organization is defined by being the first to try something new. (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Success in the organization is defined by efficiency (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

6B

**Preferred Culture**

CRITERIA OF SUCCESS of the organization: Select the option that best represents how you would **prefer** the CRITERIA OF SUCCESS in your academic unit to be.

	Strongly disagree (1)	Disagree (2)	Uncertain (3)	Agree (4)	Strongly agree (5)
Success in the organization is defined by the concern for people. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Success in the organization is defined by having innovative programs. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Success in the organization is defined by a winning attitude. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Success in the organization is defined by being the first to try something new. (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Success in the organization is defined by efficiency (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

End of Block: Part 1: Organizational Culture Assessment

Start of Block: Part 2: DEMOGRAPHICS

**DIRECTIONS** Part two of the survey provide demographic data used to determine relationships among the variables. Please choose the answer that best describes your current situation.

---

1 Please identify your current level of academic rank within your academic department:

- ☐ a) Professor (1)
  - ☐ b) Associate professor (2)
  - ☐ c) Assistant professor (3)
  - ☐ d) Lecturer/instructor (4)
  - ☐ e) Administrator (5)
  - ☐ f) Other (6) \_\_\_\_\_
- 



2 Please indicate the number of years you have worked in higher education:

- ☐ a) Total years of service \_\_\_\_\_ (1)  
\_\_\_\_\_
  - ☐ b) Years in current dept. \_\_\_\_\_ (2)  
\_\_\_\_\_
-

3 What role do you hold in teacher education?

- ☐ a) Primarily Lecturer (1)
  - ☐ b) Primarily Research (2)
  - ☐ c) Lecturer/Research combination (3)
  - ☐ c) Administrative (4)
  - ☐ d) Other (5) \_\_\_\_\_
- 

4 Please indicate the geographical region you are in according to the institution you are associated with. If you are a AAAE member please choose the region you are affiliated with. If you are not a AAAE member use the guide to determine which region you are in. Note: Texas and Oklahoma are in both the Southern and Western regions. You will decide which region you are most comfortable with.

North Central Southern Western

PA

SD

WI

WV

- ☐ North Central (1)
- ☐ Southern (2)
- ☐ Western (3)

**End of Block: Part 2: DEMOGRAPHICS**

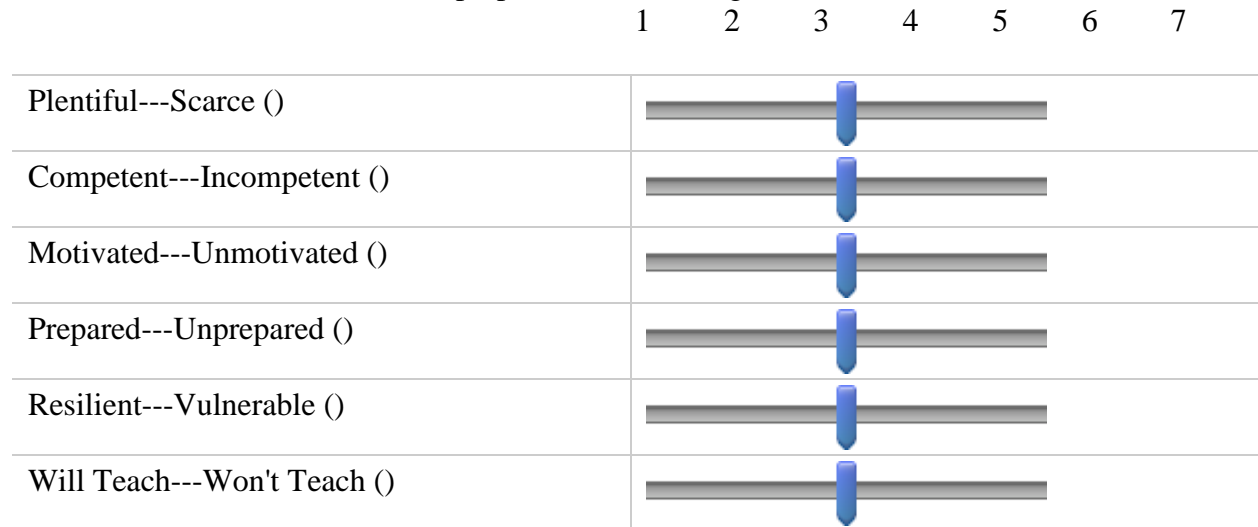
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**Start of Block: Part 3: COMPLETERS**

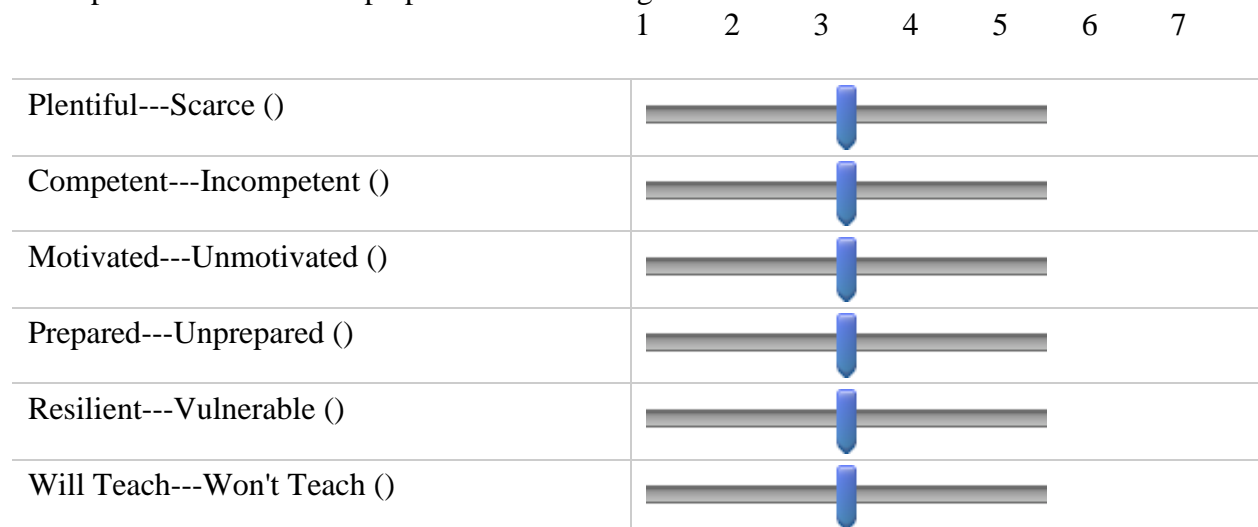
Instructions: On the scales below, please indicate your opinions about the students who enroll in the agriculture education teacher preparation program you are associated with. Slide the cursor

at each adjective which best represents your feeling about \_\_\_\_\_.  
 Numbers “1” and “7” indicate a very strong feeling. Numbers “2” and “5” indicate a fairly weak feeling. Number “4” indicates you are undecided or do not understand the adjectives themselves.  
 Please work quickly. There are no right or wrong answers.

1 students who choose the teacher preparation track in agriculture education.

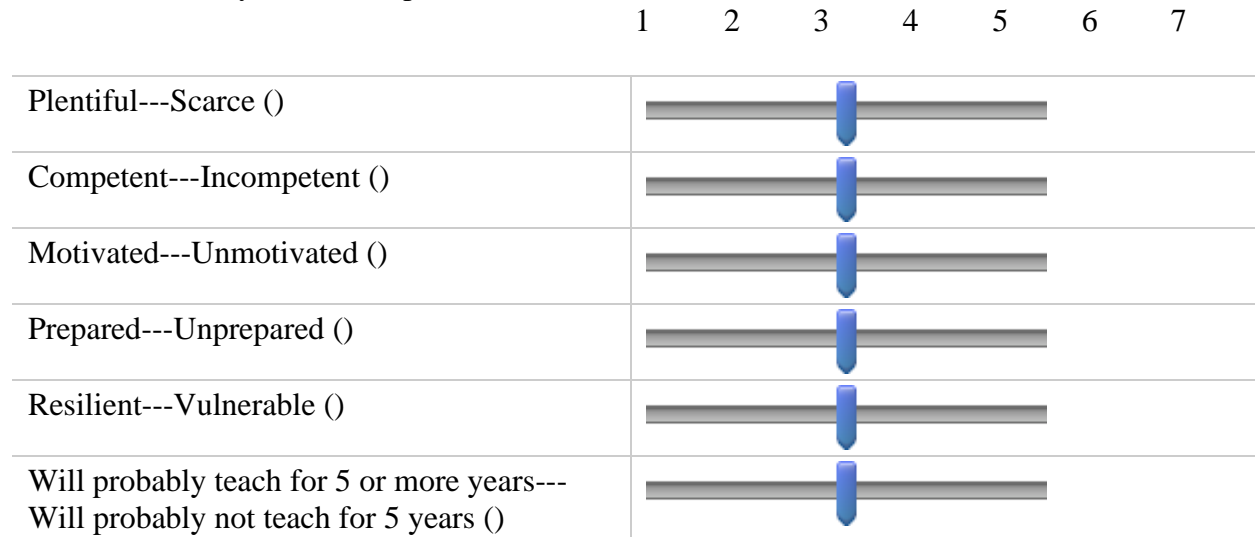


2 completers in the teacher preparation track in agriculture education.





3 Completers in the teacher preparation track in agriculture education who are employed as teachers within 2 years of completion.



**End of Block: Part 3: COMPLETERS**

**Start of Block: THANK YOU!**

THANK YOU See that wasn't so bad. Thank you so much for participating this survey. I am sure the data you have provided will serve for an interesting research project. I hope the research I am doing opens the door to future research that will help the profession of Agriculture Education continue to increase the supply of qualified educators through a better understanding of organizational culture and climate.

## APENDIX B

### IRB APPROVAL TEXAS TECH UNIVERSITY



Apr 4, 2019 12:53 PM CDT

Mathew Baker  
Ag Education and Communication

Re: IRB2019-124 Relationships of Instructional Faculty of Agricultural Education Teacher Preparation Programs of Organizational Culture and Selected Outcome Measures and Employee Characteristics

*Findings: The data being collected is de-identified, however, the target population is small and could be easily re-identified by the demographic questions. As the researcher you cannot re-identify the participants. When writing up the findings from this research, please be extra cautious to protect the identity of the participants. Consider how demographic descriptors could identify the participant.*

*On the information sheet, you need to add Dr. Baker's, PI, contact information.*

*Good luck with your research.*

Dear Dr. Mathew Baker, Erica Irbeck, Danny Johnston:

The Human Research Protection Program determined that your project meets at least one of the federal exempt categories under 45 CFR 46, Category 2 (i). Research that only includes interactions involving educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures, or observation of public behavior (including visual or auditory recording).

The information obtained is recorded by the investigator in such a manner that the identity of the human subjects cannot readily be ascertained, directly or through identifiers linked to the subjects.

The determination was made on April 4, 2019. Annual review is not required, and no expiration date will be listed on your letter.

The research must follow Texas Tech University's Operating Procedures, the Belmont Report, and 45 CFR 46. If changes to the approved protocol occur, a Modification Submission must be reviewed and approved by the IRB before implementation. Please contact the Human Research Protection Program to determine if a modification is needed or submit a Modification Submission in Cayuse IRB. Please be aware that changes to the research protocol may prevent the research from qualifying for exempt review and require submission of a new IRB application or other materials to the Texas Tech University IRB.

A goal of the IRB is to prevent negative occurrences during any research study. However, despite our best intent, unforeseen circumstances or events may arise during the research. If a deviation, unanticipated problem or adverse event happens during your research, please notify the Texas Tech University, Human Research Protection Program as soon as possible (45 CFR 46). We will ask for a complete explanation of the event and for you to submit an

Incident Submission in Cayuse IRB.

Your study may be selected for a Post-Approval Monitoring (PAM). You will be notified if your study has been chosen for a PAM. A PAM investigator may request to observe your data collection procedures, including the consent process.

Once your research is complete, please use a Closure Submission to archive this study. IRBs that remain active are subject to audit by the IRB.

Sincerely,

A handwritten signature in black ink, appearing to read 'Scott Burris'.

Scott Burris, Ph.D.  
Chair Texas Tech University Institutional Review Board  
Professor, Department of Agricultural Education and Communications  
Human Research Protection Program  
357 Administration Building  
Lubbock, Texas 79409-1075  
T 806.742.2064  
[www.hrrp.ttu.edu](http://www.hrrp.ttu.edu)

## APENDIX C

### IRB APPROVAL MODIFICATION TEXAS TECH UNIVERSITY



Jun 25, 2019 9:33 AM CDT

Mathew Baker  
Ag Education and Communication

Re: IRB2019-124 Relationships of Instructional Faculty of Agricultural Education Teacher Preparation Programs of Organizational Culture and Selected Outcome Measures and Employee Characteristics  
Findings: Modification to survey approved.

Dear Dr. Mathew Baker, Erica Irbeck, Danny Johnston:

The proposed modification has been approved to the protocol referenced above within the exempt category of: Category 2.(i). Research that only includes interactions involving educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures, or observation of public behavior (including visual or auditory recording).

The information obtained is recorded by the investigator in such a manner that the identity of the human subjects cannot readily be ascertained, directly or through identifiers linked to the subjects.

Exempt research is not subject to annual review by the IRB. Any change to your protocol requires a Modification Submission for review and approval prior to implementation.

A goal of the IRB is to prevent negative occurrences during any research study. However, despite our best intent, unforeseen circumstances or events may arise during the research. If a deviation, unanticipated problem or adverse event happens during your research, please notify the Texas Tech University, Human Research Protection Program as soon as possible (45 CFR 46). We will ask for a complete explanation of the event and for you to submit an Incident Submission in Cayuse IRB.

Your study may be selected for a Post-Approval Monitoring (PAM). You will be notified if your study has been chosen for a PAM. A PAM investigator may request to observe your data collection procedures, including the consent process.

Once your research is complete, please use a Closure Submission to terminate this protocol.

Sincerely,

A handwritten signature in black ink, appearing to read 'Scott Burris'.

Scott Burris, Ph.D.  
Chair Texas Tech University Institutional Review Board  
Professor, Department of Agricultural Education and Communications  
Human Research Protection Program

357 Administration Building  
Lubbock, Texas 79409-1075  
T 806.742.2064  
[www.hrpp.ttu.edu](http://www.hrpp.ttu.edu)

## APPENDIX D

### IRB APPROVAL TEXAS A & M

DIVISION OF RESEARCH



#### EXEMPTION DETERMINATION (Common Rule –Effective January, 2018)

August 29, 2019

Type of Review:	Initial Submission
Title:	Relationships of Instructional Faculty of Agricultural Education Teacher Preparation Programs of Organizational Culture and Selected Outcome Measures and Employee Characteristics
Investigator:	Timothy Murphy (with Danny Johnston)
IRB ID:	IRB2019-0698M
Reference Number:	095864
Funding:	None/Internal
Documents Reviewed:	IRB Application (Human Research) - (Version 1.1) Johnston_Survey Modification (1) - (Version 1.0) Approval Letter TTU IRB - (Version 1.0) TTU IRB form - (Version 1.0) YOUR READABILITY RESULTS _ ReadabilityFormulas.com - (Version 1.0) Johnston_Survey Modification (1) - (Version 1.0)
Review Category:	Category 2: Research that only includes interactions involving educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures, or observation of public behavior (including visual or auditory recording) if at least one of the following criteria is met: i. The information obtained is recorded by the investigator in such a manner that the identity of the human subjects cannot readily be ascertained, directly or through identifiers linked to the subjects; ii. Any disclosure of the human subjects' responses outside the research would not reasonably place the subjects at risk of criminal or civil liability or be damaging to the subjects' financial standing, employability, educational advancement, or reputation; or iii. The information obtained is recorded by the investigator in such a manner that the identity of the human subjects can readily be ascertained, directly or through identifiers linked to the subjects, and an IRB conducts a limited IRB review to make the determination required by .111(a)(7).

750 Agronomy Road, Suite 2701  
1196 TAMU  
College Station, TX 77843-1196  
Tel: 979 458 1467 Fax: 979 862 3176  
http://irb.tamtu.edu

Dear Timothy Murphy and Danny Johnston:

The HRPD determined on 08/29/2019 that this research meets the criteria for Exemption in accordance with 45 CFR 46.104.

This determination applies only to the activities described in this IRB submission and does not apply should any changes be made. If changes are made you must immediately contact the IRB. You may be required to submit a new request to the IRB.

Your exemption is good for three (3) years from the Approval Start Date. Thirty days prior to that time, you will be sent an Administrative Check-in Notice to provide an update on the status of your study.

If you have any questions, please contact the IRB Administrative Office at 1-979-458-4067, toll free at 1-855-795-8636.

Sincerely,  
IRB Administration